

LETTER OF TRANSMITTAL

TRANSMITTAL # 4

J.P. CARRARA & SONS, INC.

2464 CASE ST
MIDDLEBURY, VT 05753
T: 802.388.6363
F: 802.388.9010

DATE:	4.6.15	JOB #	23454-014
ATTN:	Brian Emmons/T.Buck Construction Inc.		
RE:	Burke, VT BRF 0269 (13)		

We are sending you:

Shop Drawings	<input checked="" type="checkbox"/>	Change Order	<input type="checkbox"/>	Copy of Letter	<input type="checkbox"/>
Plans	<input type="checkbox"/>	Attached	<input checked="" type="checkbox"/>	Separate Cover	<input type="checkbox"/>
Prints	<input type="checkbox"/>	Specifications	<input type="checkbox"/>	(Via)	
Samples	<input type="checkbox"/>	Other:			

Copies	Date	Qty.	Description
1	4.6.15	1	Shop Drawings (Rev 2) Submitted for Approval

These are transmitted as checked below:

For approval	<input checked="" type="checkbox"/>	Approved as submitted	<input type="checkbox"/>	Submit	<input checked="" type="checkbox"/>
For your use	<input type="checkbox"/>	Approved as noted	<input type="checkbox"/>	Resubmit	<input type="checkbox"/>
As requested	<input type="checkbox"/>	Returned /Notation	<input type="checkbox"/>	Return	<input type="checkbox"/>
For review	<input type="checkbox"/>	Loaned Prints/Returned	<input type="checkbox"/>	Other	<input type="checkbox"/>


Remarks:

Please see attached Burke shop drawings for approval.

Please consider an expeditious review of components requiring LVL II reinforcement (Dual Coated / Z Bar) as there is currently a one month production lead time on Zbar/Rebar products.

Specification subsections 510.04(b)(7) and 540.04(b)(7) allow for the use of the previously submitted mixes in lieu of submitting additional mix designs. **Previously approved mix designs are being resubmitted as requested for Burke precast concrete components and demonstrate updated aggregate properties with NO OTHER CHANGES TO PREVIOUSLY SUBMITTED/CURRENTLY APPROVED MIX DESIGNS.**

Copy to:

Signed:  Joe Gallese-PM

If enclosures are not as noted, please notify us immediately.

1. MIN. CONCRETE STRENGTH AT 28 DAYS SHALL BE 5,000 PSI.
2. MIN. CONCRETE STRENGTH AT STRIPPING SHALL BE 4,000 PSI (UNLESS NOTED OTHERWISE).
3. REINFORCING STEEL SHALL BE GR-60, ASTM A-615 (AASHTO M31 LEVEL II (DUAL COATED) (ASTM A-1055) OR LEVEL I (BLACK STEEL), (AS NOTED ON SHOP DRAWINGS).
4. THE TOP OF PRECAST CONCRETE UNITS SHALL RECEIVE A SMOOTH FLOAT FINISH (UNLESS NOTED OTHERWISE).
5. SHEAR KEY SURFACES SHALL BE SAND BLASTED CLEAN. REINFORCING STEEL PROJECTING FROM APPROACH SLABS WILL BE COVERED DURING SAND BLASTING SO THAT COATING IS NOT DAMAGED.
6. APPROACH SLABS SHALL BE HANDLED AND ERECTED USING THE LIFTING INSERTS ONLY. THE MINIMUM SLING ANGLE FROM THE HORIZONTAL SHALL BE 60°. APPROACH SLABS SHALL BE STORED & TRANSPORTED WITH TIMBER SUPPORTS AT 5th POINTS, UNLESS APPROVED BY J.P. CARRARA & SONS, INC.
7. ABUTMENTS SHALL BE HANDLED AND ERECTED USING THE LIFTING LOOPS ONLY. THE PINS OF THE SHACKLES SHALL BE PLACED THROUGH THE LIFTING INSERTS. SEE DETAIL SHEET PG. 17. VERTICAL FORCES ONLY SHALL BE APPLIED TO THE LIFTING LOOPS. ABUTMENTS SHALL BE STORED & TRANSPORTED WITH TIMBER SUPPORTS AT 5th POINTS, UNLESS APPROVED BY J.P. CARRARA & SONS, INC.
ONCE ABUTMENTS HAVE BEEN ERECTED, CUT LIFTING LOOPS AT RECESS, EPOXY PAINT AND PATCH AS REQUIRED (BY OTHERS).
8. MATERIAL SPECIFICATION AND MIX DESIGN SHALL CONFORM TO VERMONT SPEC. F510.02 AND F510.05 RESPECTIVELY.
DESIGN MIX:
APPROACH SLABS: J.P.C. BRIDGE MIX #445MCC
ABUTMENTS: J.P.C. BRIDGE MIX #445MCC
9. QUALITY CONTROL PROCEDURES ARE IN ACCORDANCE WITH PCI REQUIREMENTS. J.P. CARRARA & SONS, INC. IS A PCI CERTIFIED PLANT.
10. CURING METHOD: AS SOON AS THE TOP OF PRECAST CONCRETE UNITS ARE FINISHED, A COVER OF POLY WILL BE PLACED OVER THE UNIT. NATURAL CURE WITH NO EXTERNAL HEAT APPLIED. CURING SHALL CONTINUE UNTIL STRIPPING STRENGTH HAS BEEN ACHIEVED.

1. MIN. CONCRETE STRENGTH AT 28 DAYS SHALL BE 10,000 PSI.
2. MIN. CONCRETE STRENGTH AT STRESS TRANSFER SHALL BE 8,000 PSI.
3. REINFORCING STEEL SHALL BE GR-60, ASTM A-615 (AASHTO M91) LEVEL II (DUAL COATED).
4. PRESTRESSING STRANDS SHALL CONFORM TO ASTM A-416 (AASHTO M203) AND SHALL CONSIST OF 0.60"x20 270 KSI 1-1/2" L-19" L-14" RELAXATION STRANDS.
5. PRESTRESSING STRANDS SHALL EACH BE PULLED TO HAVE A NET TENSION OF 41.0 K. AFTER ACCOUNTING FOR CHUCK SLIPPAGE. TENSION SHALL BE VERIFIED BY MEASURING STRAND ELONGATION (SEE EXAMPLE ELONGATION CALCULATION AND TENSIONING PROCEDURE, THIS SHEET).
6. ENDS OF PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH END OF NEXT BEAM STEPS (UNLESS NOTED OTHERWISE) AND COATED WITH TWO PART EPOXY PAINT SYSTEM.
7. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
8. THE TOP OF BEAMS SHALL RECEIVE A SMOOTH SCREED (UNLESS NOTED OTHERWISE).
9. SHEAR KEY SURFACES SHALL BE SAND BLASTED TO 1/8" AMPLITUDE.
10. BEAMS SHALL BE HANDLED AND ERECTED USING THE LIFTING LOOPS ONLY. RIGGING SHALL BE CONFIGURED SUCH THAT EQUAL AND VERTICAL FORCES ARE APPLIED TO EACH OF THE TWO LIFTING LOOPS AT EACH END OF THE BEAM. THE PINS OF THE SHACKLES SHALL BE PLACED THROUGH THE LIFTING LOOPS. (SEE DETAIL, THIS SHEET). BEAMS SHALL BE STORED AND TRANSPORTED WITH TIMBER SUPPORTS. TIMBER SUPPORTS SHALL BE PLACED WITHIN CLOSE PROXIMITY TO THE SHIPPING SLEWING LOCATION AS SHOWN BELOW, UNLESS APPROVED BY J.P. CARRARA & SONS, INC.
11. MATERIAL SPECIFICATION AND MIX DESIGN SHALL CONFORM TO VERMONT SPEC. F501.02 AND F501.05 RESPECTIVELY.
DESIGN MIX: J.P.C.

NEXT BEAM MIX #430M WITH 5 GALLONS OF CORROSION INHIBITOR

12. QUALITY CONTROL PROCEDURES ARE IN ACCORDANCE WITH PCI REQUIREMENTS. J.P. CARRARA & SONS, INC. IS A PCI CERTIFIED PLANT.
13. CURING METHOD: AS SOON AS THE TOP OF BEAM IS FINISHED, A COVER OF INSULATED POLY. THE DESIRED CURING TEMPERATURE RANGE SHALL NOT DROP BELOW 70°F. THE TEMPERATURE SHALL BE RECORDED BY AUTOMATIC SENSOR INSTRUMENTS ON GRAPH CHARTS SPACED NOT MORE THAN 100' APART AND WILL CONTINUE UNTIL RELEASE STRENGTH IS ACHIEVED. EACH CHART SHALL BE MARKED WITH THE CASTING DATES AND LOCATION OF THE RECORDER. IF NECESSARY TO MAINTAIN TEMPERATURES ABOVE 70°F, HEATERS TO CONCRETE PLACEMENT OR TO ACCELERATE EARLY AGE STRENGTH GAIN EXTERNAL RADIANT HEAT MAY BE EMPLOYED VIA HOT WATER DUCTS BENEATH AND WITHIN THE PERIPHERY OF THE CASTING BED. MAXIMUM CURING TEMPERATURE SHALL NOT EXCEED PCI SPECIFIED LIMITS.
14. OWNER SHALL PROVIDE APPROPRIATE FIELD WATERPROOFING TO GROUDED REINFORCED SHEAR KEYS. AFTER 48 HOURS, 4 SONS, INC. SHALL NOT BE HELD LIABLE FOR PROBLEMS ASSOCIATED WITH MOISTURE INFILTRATING GROUDED AND/OR EPOXYED SHEAR KEYS.

(NOT TO BE USED FOR CONSTRUCTION)

SIZE & GRADE: 0.60"ø x 270 KSI
AREA: 0.211 in²
TENSION: 44,000 LB. EACH STRAND
GRIP-TO-GRIP: 252'-0" = 252.00'
Es = 285,000 PSI (ASSUMED FOR THESE CALCULATIONS; VALUE TO BE OBTAINED FOR STRAND SPOOL ACTUALLY USED)

EXAMPLE:

$$\Delta = \frac{PL}{AE} = \frac{(44,000 - 3,000) \times 252.00 \times 12}{0.211 \times 285,000,000} = 20.041"$$

THEREFORE, (TOLERANCES ± 5%)

Δ UPPER LIMIT = 1.05 x 20.041" = 21.05" ± 1"
Δ LOWER LIMIT = 0.95 x 20.041" = 19.04" ± 1"

EXTRA FORCE REQUIRED TO COMPENSATE FOR 1/2" CHUCK SLIPPAGE:

$$\Delta P = \frac{0.5 \times 41,000}{20.041} = 1,023 \text{ LBS.}$$

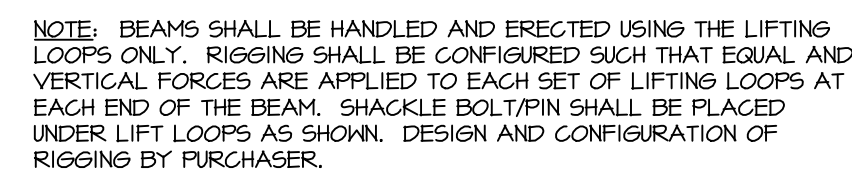
TOTAL TENSIONING FORCE = 44,000 + 1,023 = 45,023 LBS.

ADDITIONALLY, INCREASED ELONGATION AND THE CORRESPONDING FORCE DUE TO FORM SHORTENING SHALL BE ACCOUNTED FOR IN THE CALCULATIONS USED FOR CONSTRUCTION PER PROVISION FC1 IN6 5.3.11.3.

1. PULL EACH STRAND INITIALLY TO 3,000* LBS. AND MARK STRAND.
2. THEN PULL EACH STRAND TO A TOTAL TENSION OF 45,023* LBS. AND MEASURE ELONGATION AFTER SEATING. IT MUST BE BETWEEN 13" AND 21".

* NOTE: FORCES READ ON STRESSING JACK GAUGES MUST BE MADE TO CORRESPOND TO ABOVE VALUES BASED ON CALIBRATION DATA FOR SPECIFIC JACK USED.

3. STRANDS IN BOTTOM TWO ROWS SHALL BE RE-PULLED TO VERIFY SHORTENING EFFECT OF SELF STRESSING BED. RE-PULL FORCE SHALL NOT INCLUDE OVER-PULL FOR SHORTENING.



N.T.S.



DRAWING INDEX			
SHT. #	DRAWING TITLE	REV. #	REV. DATE
C1	COVER SHEET	2	04-03-15
F1	PRECAST ABUTMENT APPROACH SLAB & NEXT BEAM LAYOUT	2	04-03-15
F2	PRECAST ABUTMENT # 1 ELEVATION & SECTIONS	2	04-03-15
F3	PRECAST ABUTMENT # 2 ELEVATION	2	04-03-15
F4	TRANSVERSE SECTIONS & DETAILS	2	04-03-15
		2	
AB1	PRECAST ABUTMENT PLANS & SECTION	2	04-03-15
AB2	PRECAST ABUTMENT # 1 DETAILS	2	04-03-15
AB3	PRECAST ABUTMENT # 2 DETAILS	2	04-03-15
AB4	PRECAST ABUTMENT # 3 DETAILS	2	04-03-15
AB5	PRECAST ABUTMENT # 4 DETAILS	2	04-03-15
AS1	PRECAST APPROACH SLAB DETAILS	2	04-03-15
AS2	PRECAST APPROACH SLAB DETAILS	2	04-03-15
AS3	PRECAST APPROACH SLAB DETAILS	2	04-03-15
NB1A	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB1B	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB1C	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB1D	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB2A	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB2B	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB2C	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB3A	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB3B	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB3C	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
NB3D	PRESTRESSED NEXT BEAM DETAILS	2	04-03-15
M1	MATERIALS LIST	2	04-03-15
M2	MATERIALS LIST	2	04-03-15
M3	MATERIALS LIST	2	04-03-15

DESIGN LIVE LOAD: HL-93

2 01-22-15 REVISED

APPROVAL STAMP:

J.P. CARRARA & SONS INC.
Precast & Prestress Manufacturer
2464 CASE STR., MIDDLEBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9000

T. BUCK CONSTRUCTION, INC.
CONTRACTOR
AUBURN, MAINE

STATE OF VERMONT AGENCY OF TRANSPORTATION
COUNTY OF CALEDONIA


DATE: MAR 26, 2015

SCALE: NOTED

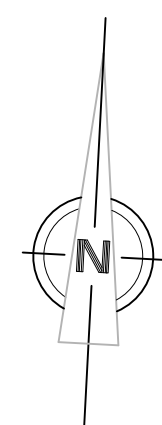
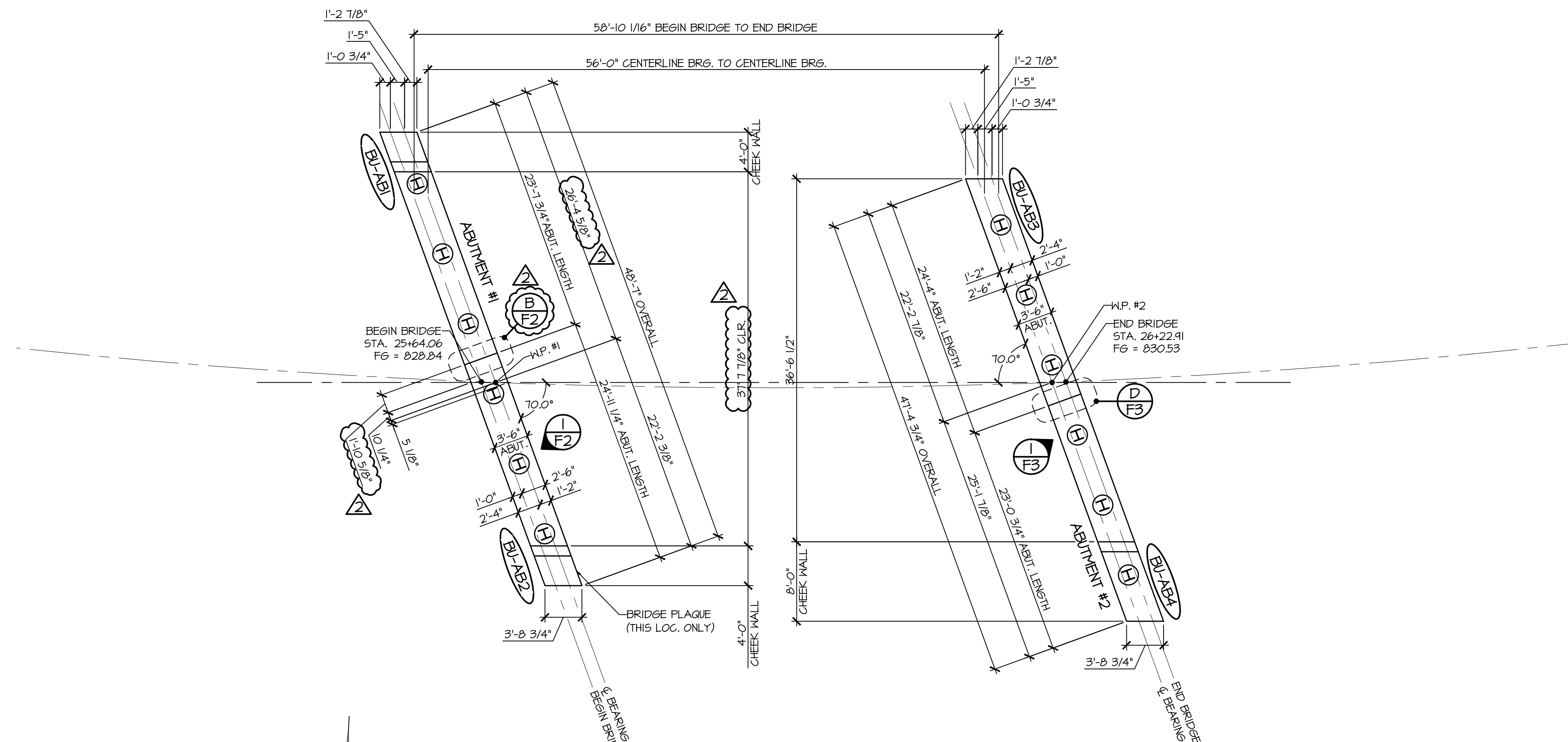
TOWN OF BURKE
VERMONT ROUTE 114
BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)

CHKD: --	DFTM: JDK
----------	-----------

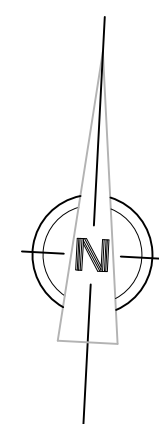
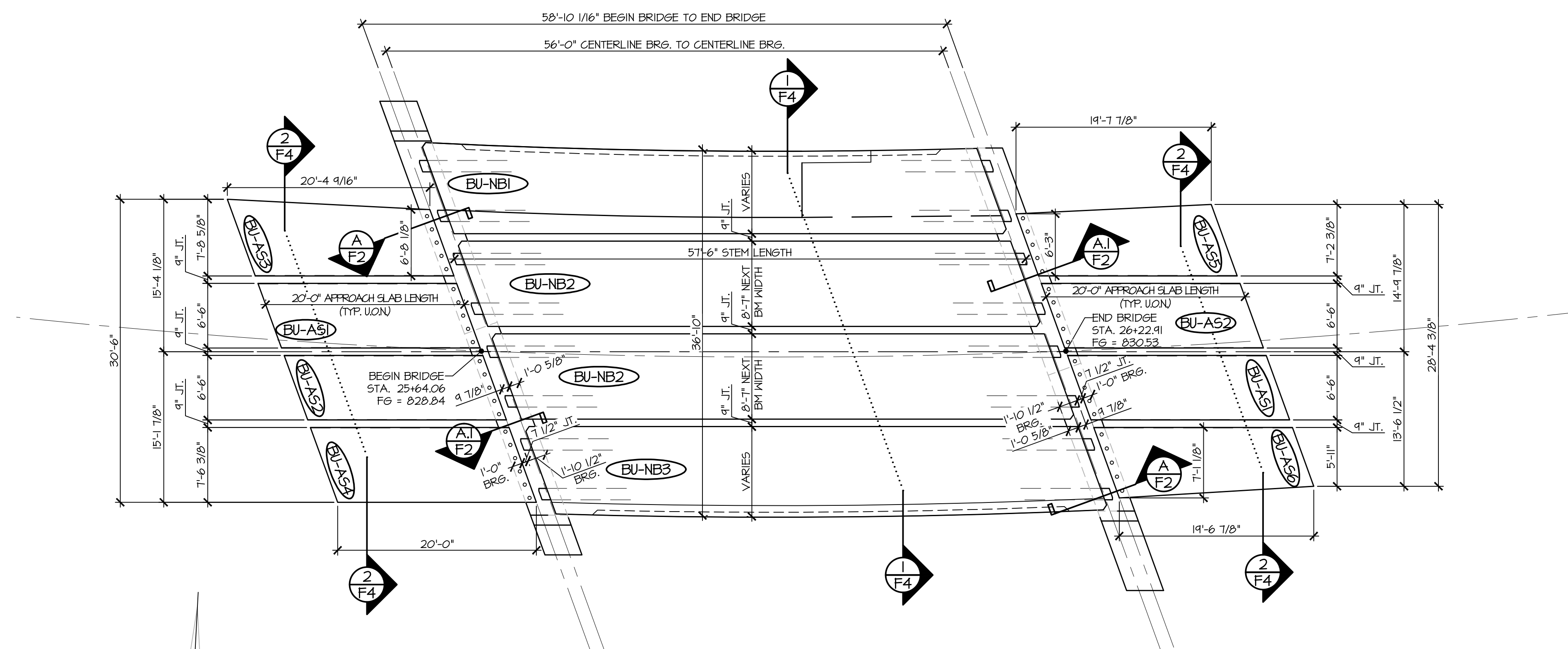
JOB NO: 23454-015

DWG. NO: 

COVER SHEET

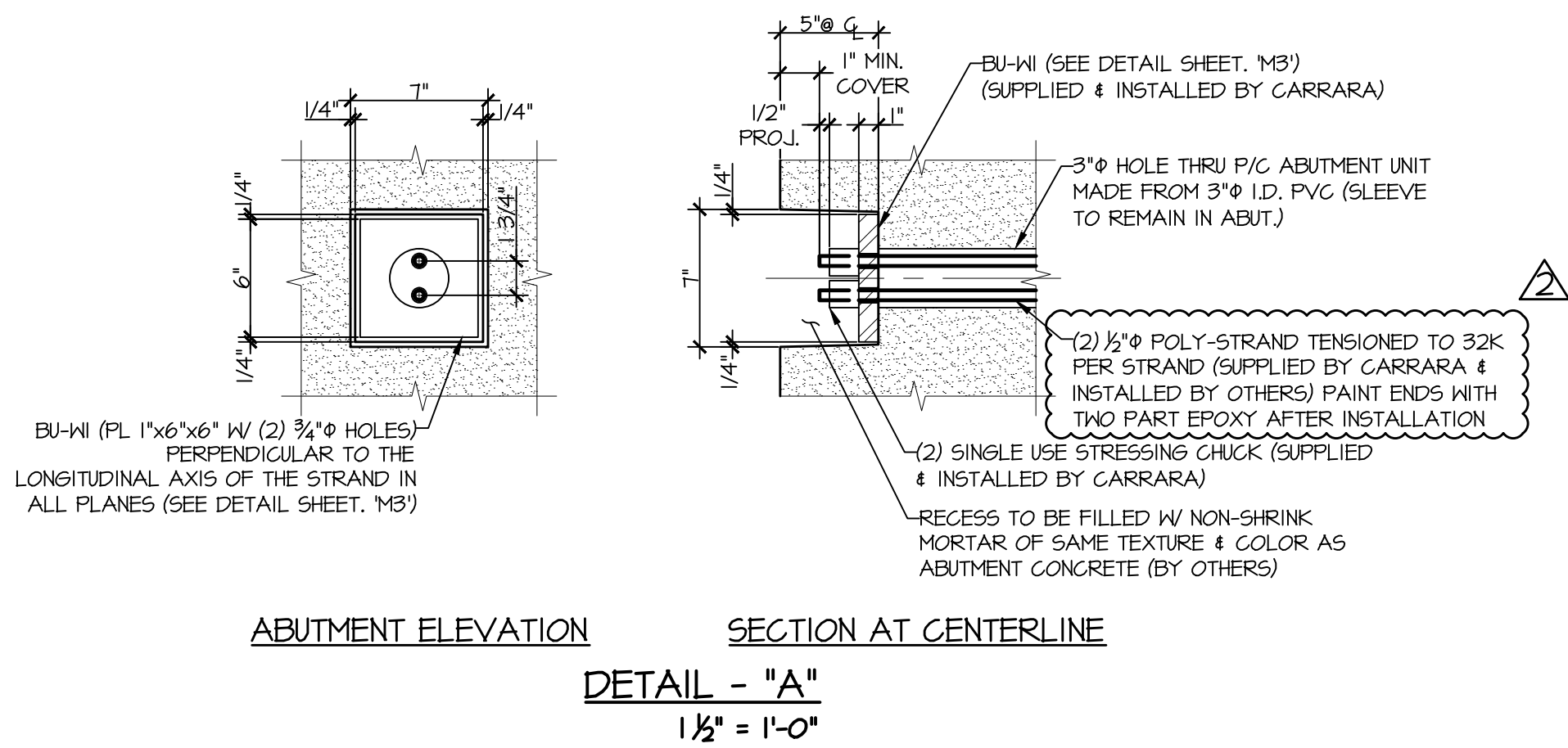
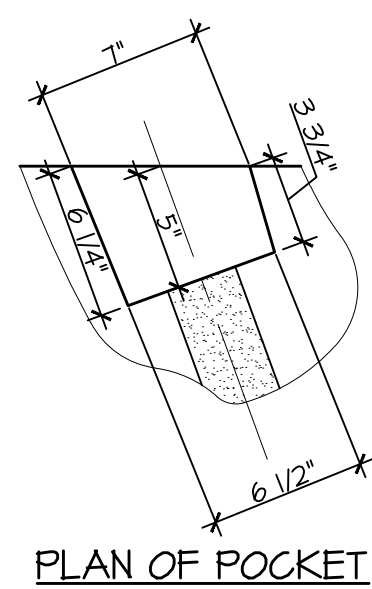
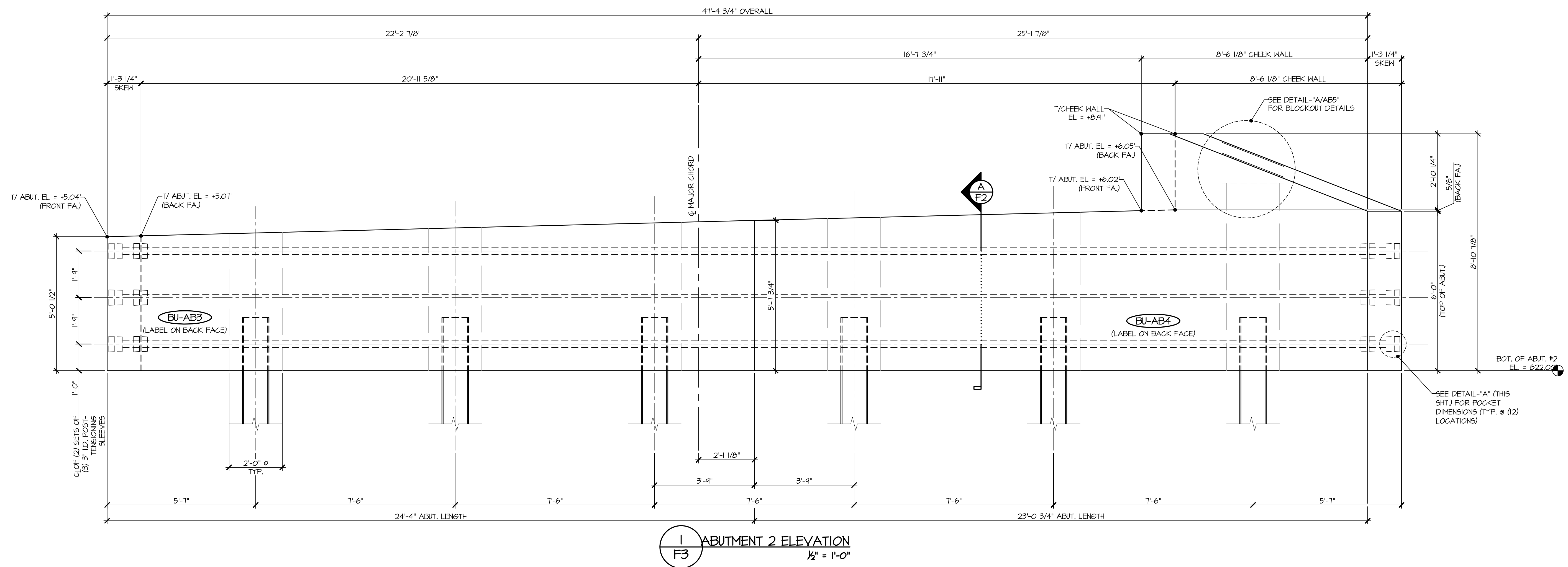


1
FI PRECAST CONCRETE ABUTMENT
1/8" = 1'-0"

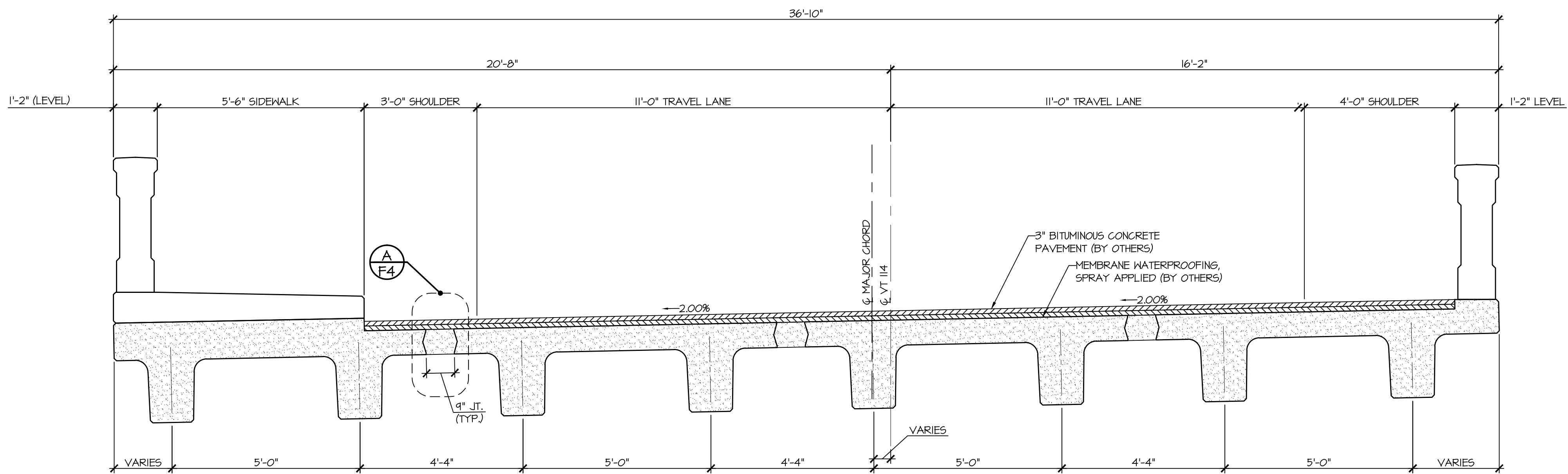


2
FI PRECAST APPROACH SLAB & NEXT BEAM LAYOUT
1/8" = 1'-0"

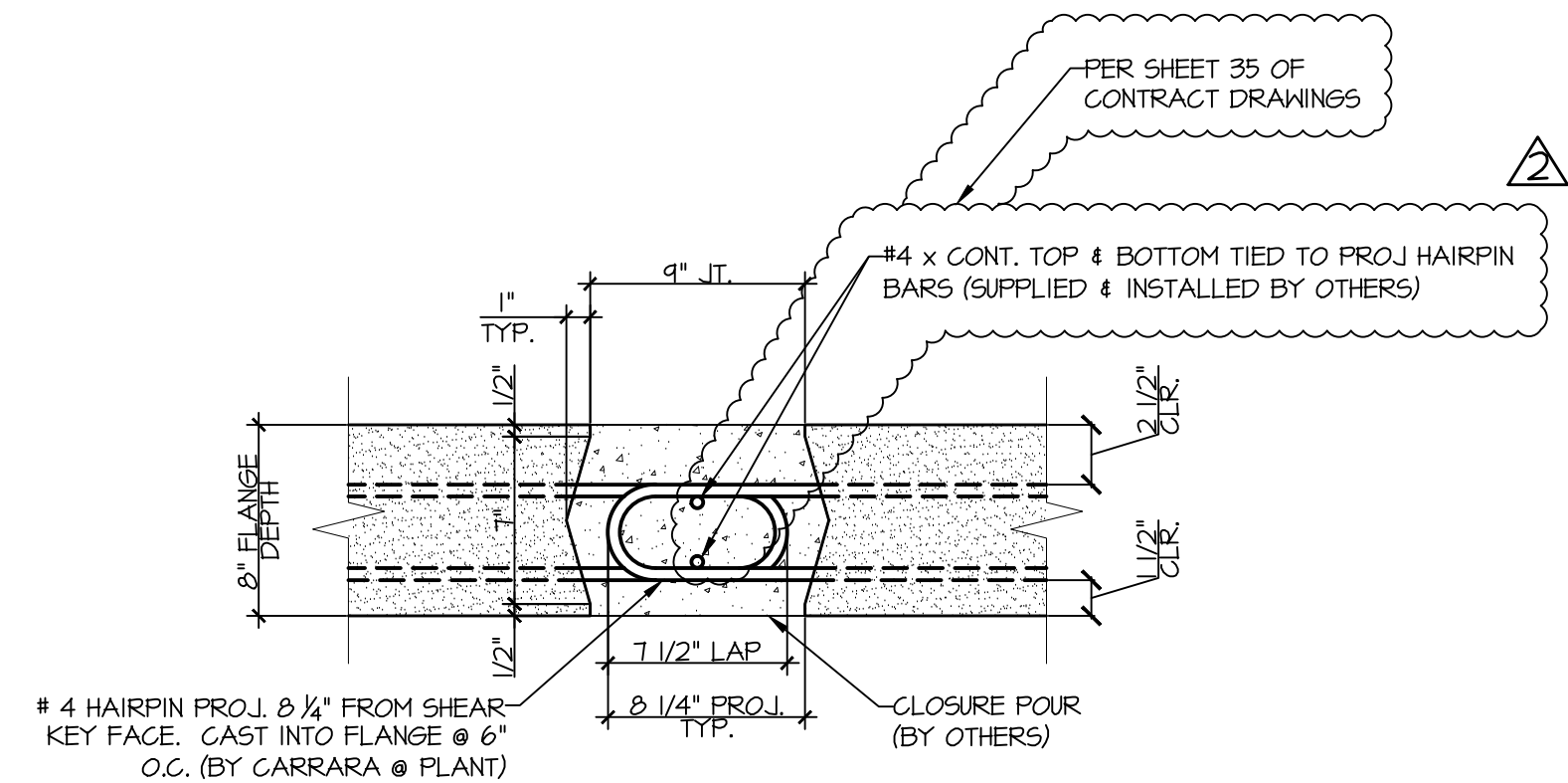
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE STR, MOORESBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		CHKD:	DFTM: JDC
			JOB NO:	23454-015
	PRECAST ABUTMENT APPROACH SLAB & NEXT BEAM LAYOUT		DWG. NO: FI	



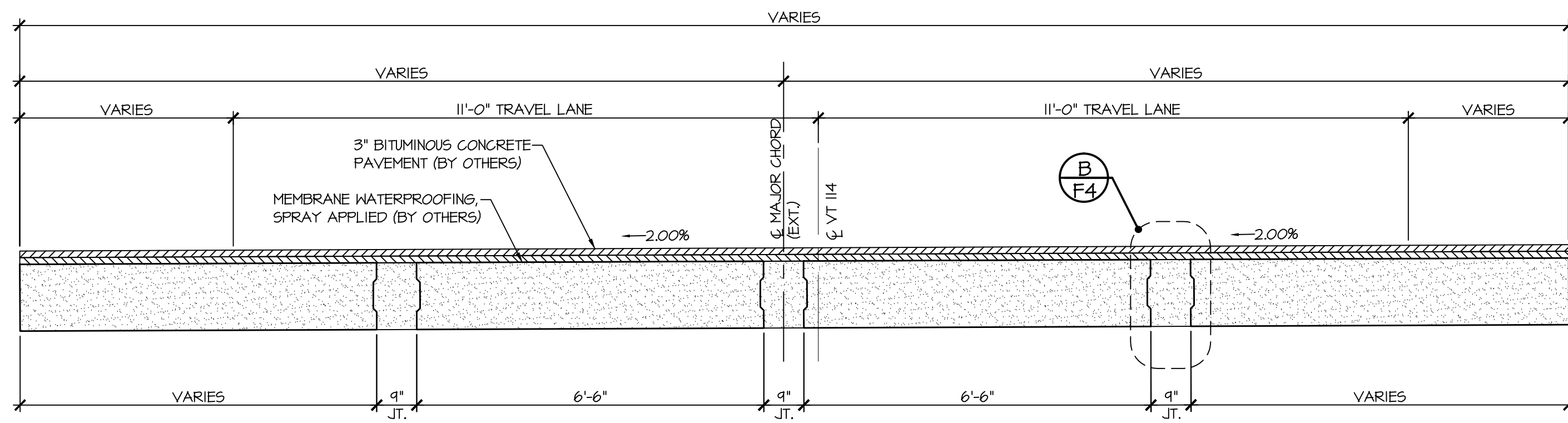
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer <small>2464 CASE ST., MOOREBURGH, VERMONT 05753 Phone: (802) 388-6361 Fax: (802) 388-9010</small>		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		SCALE: NOTED	
	PRECAST ABUTMENT # 2 ELEVATION		CHKD: DFTM: JDK JOB NO: 23454-015 DWG. NO: F3	



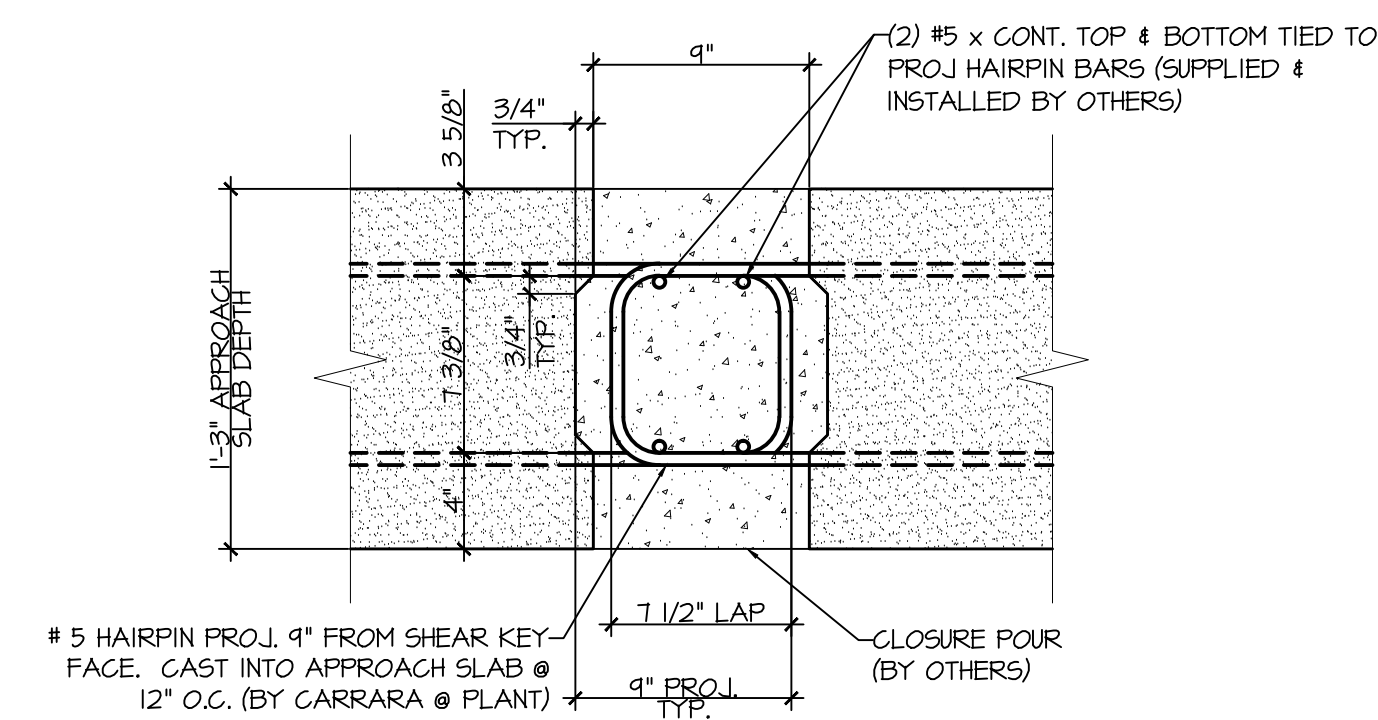
I
F4 NEXT BEAM TRANSVERSE SECTION
1/2" = 1'-0"



A
F4 NEXT BEAM CLOSURE POUR
1/2" = 1'-0"

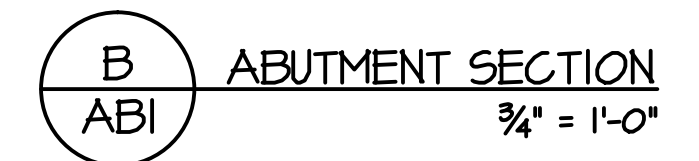


2
F4 APPROACH SLAB TRANSVERSE SECTION
1/2" = 1'-0"

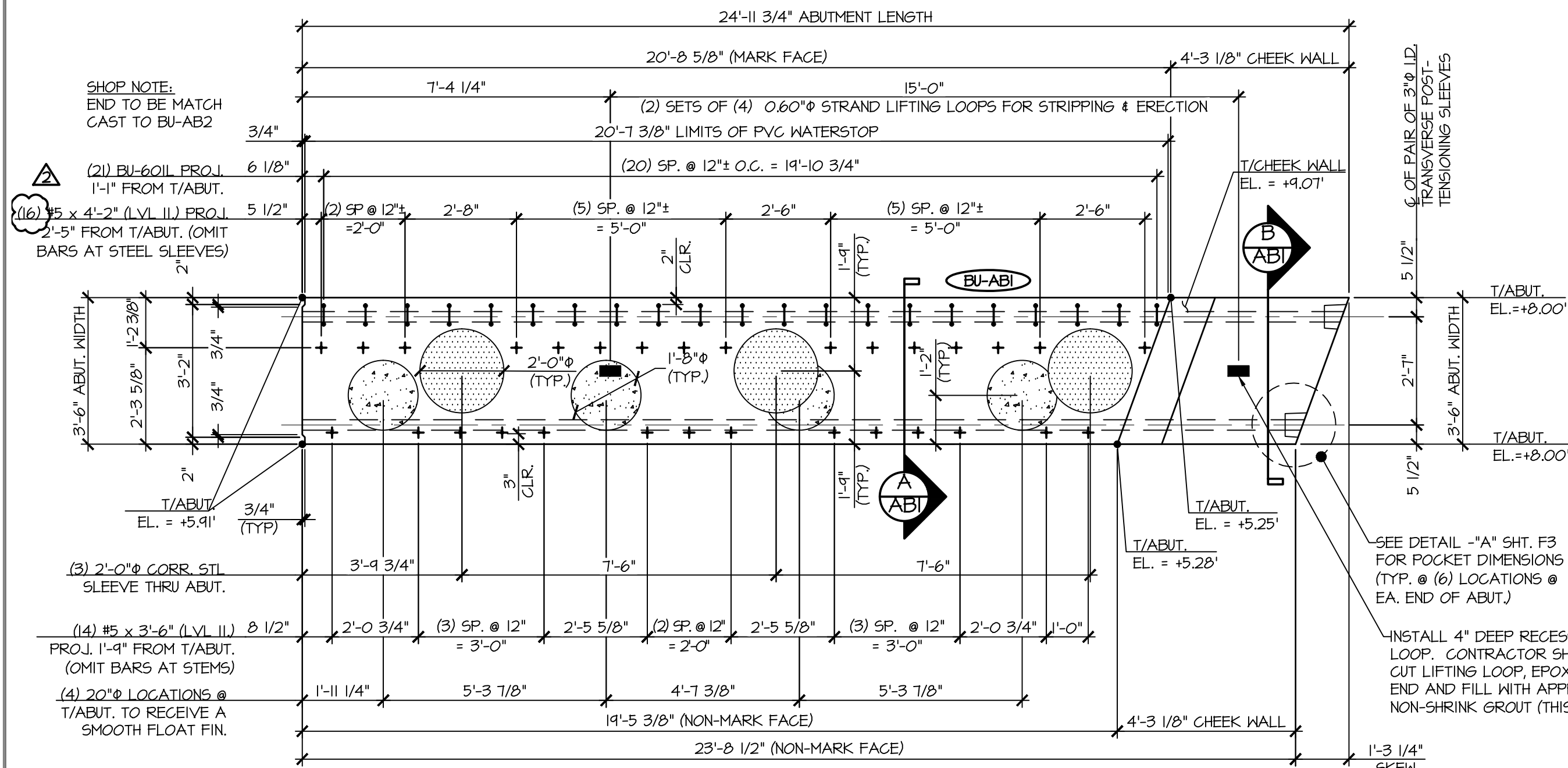


B
F4 APPROACH SLAB CLOSURE POUR
1/2" = 1'-0"

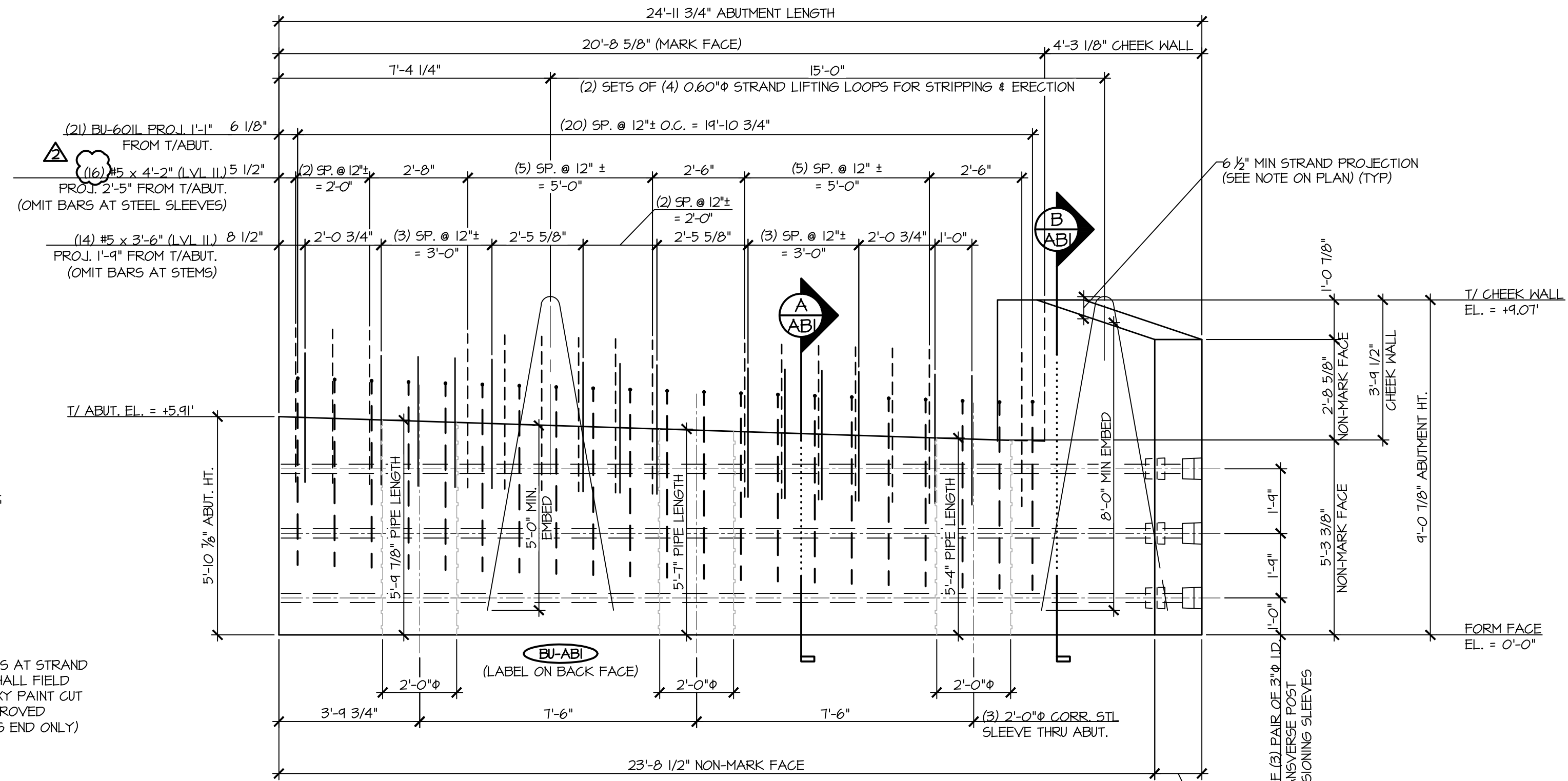
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE STR., MIDDLEBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		CHKD:	DFTM: JDC
			JOB NO:	23454-015
	TRANSVERSE SECTIONS & DETAILS		DWG. NO:	F4



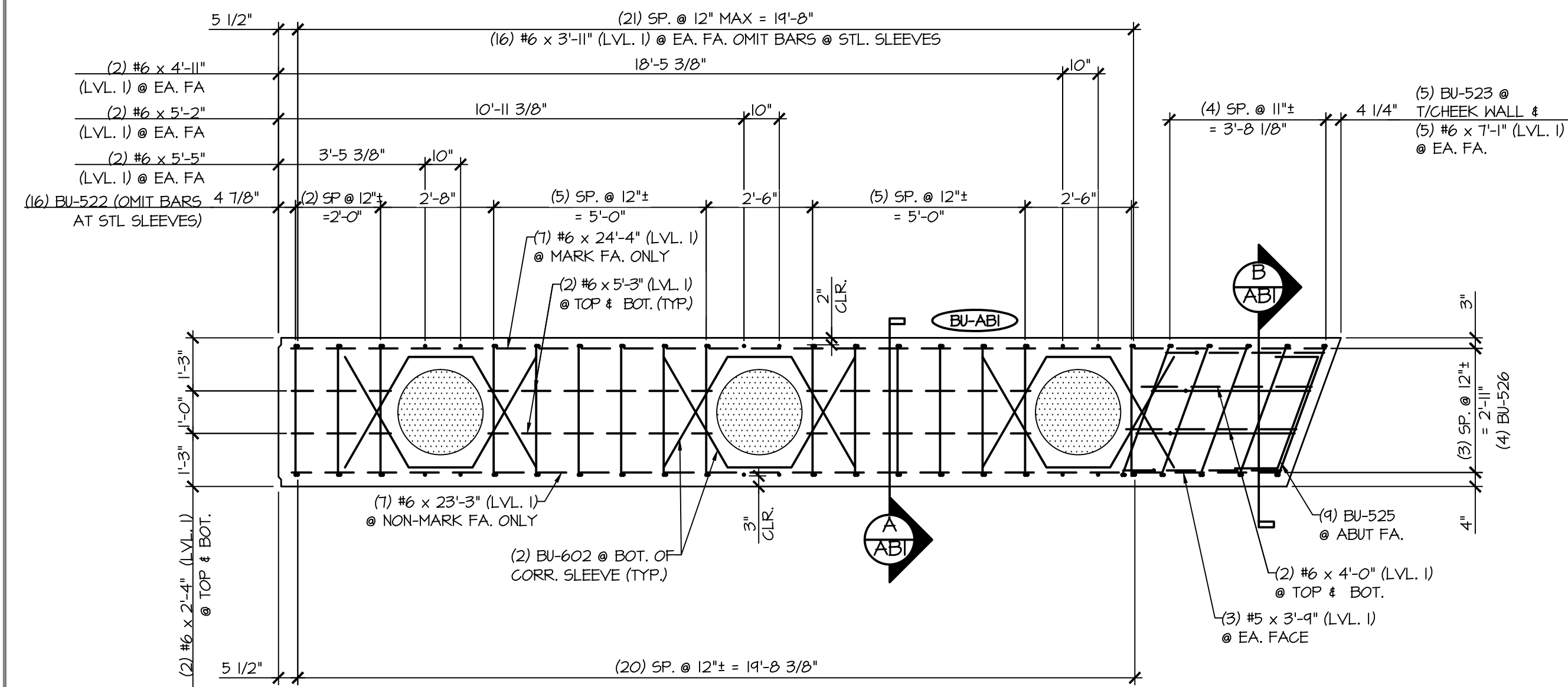
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2454 OASE STR., WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRP 0269(13)		CHKD:	DFTM: JDK
			JOB NO: 23454-015	
	PRECAST ABUTMENT PLANS & SECTION		DWG. NO: ABI	



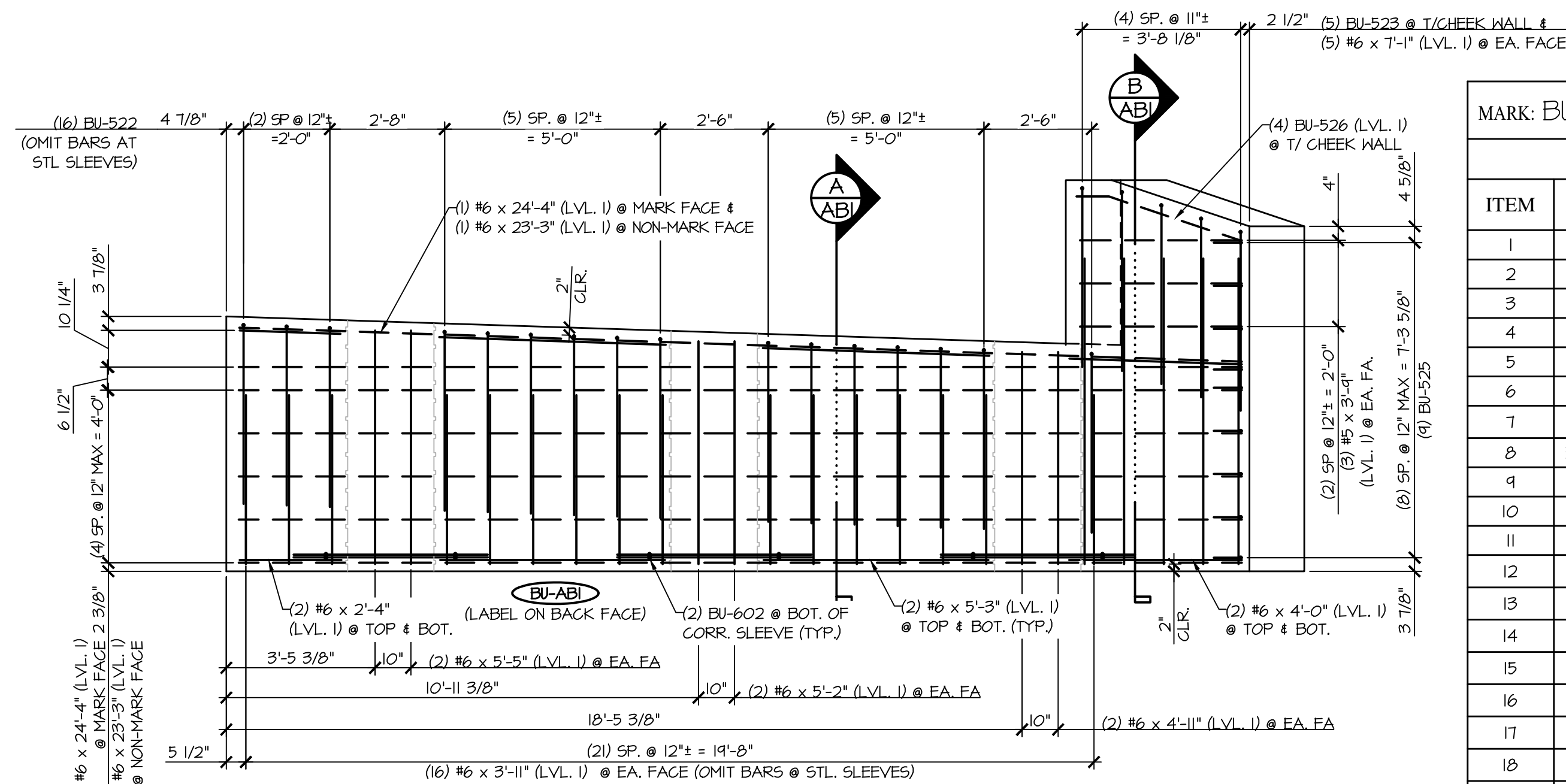
1
AB2
ABUTMENT DIMENSIONAL PLAN VIEW IN FORM
3/8" = 1'-0"



2
AB2
ABUTMENT DIMENSIONAL NON-MARK FACE ELEVATION
3/8" = 1'-0"



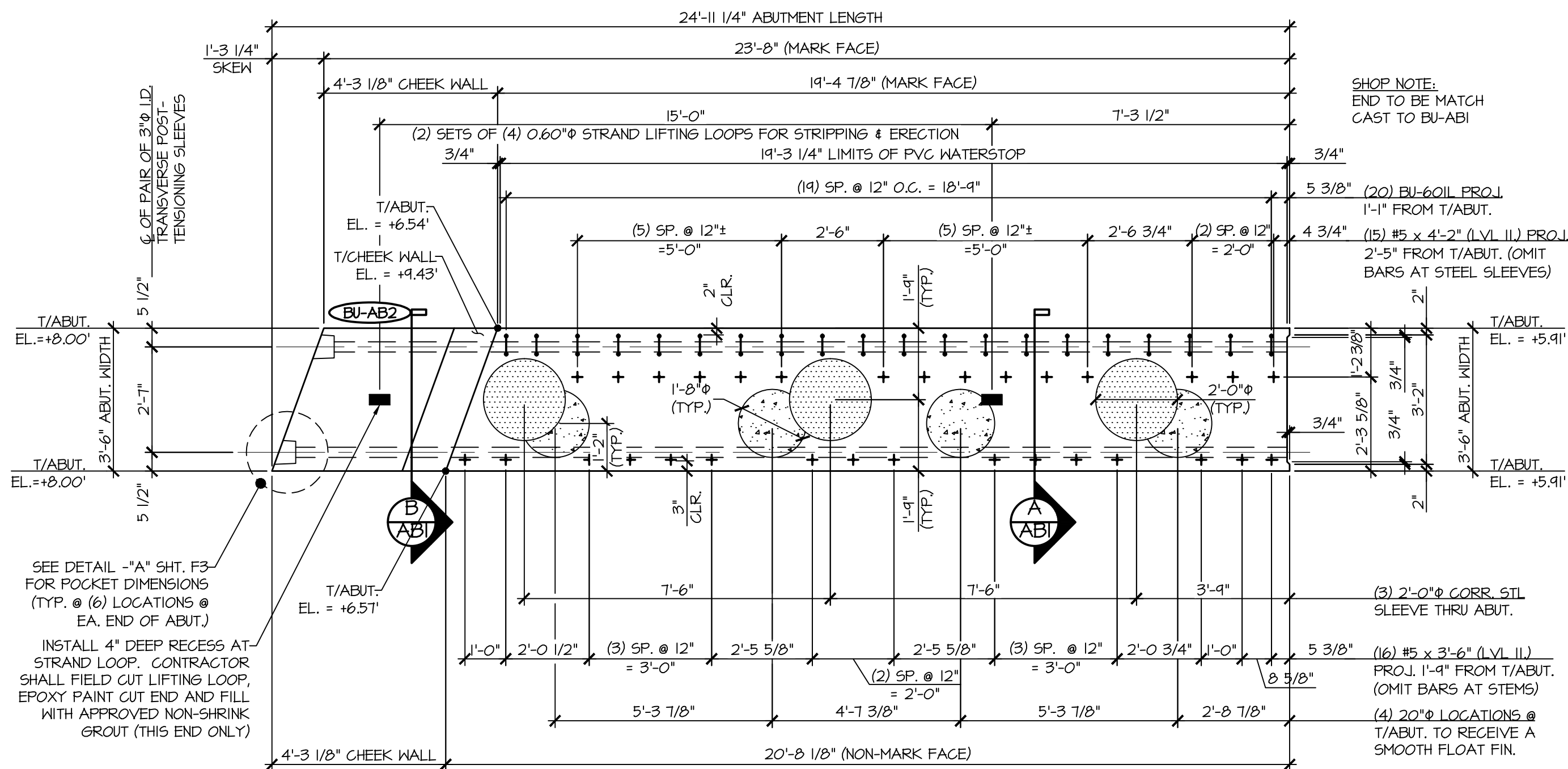
3
AB2
ABUTMENT REINFORCING PLAN VIEW IN FORM
3/8" = 1'-0"



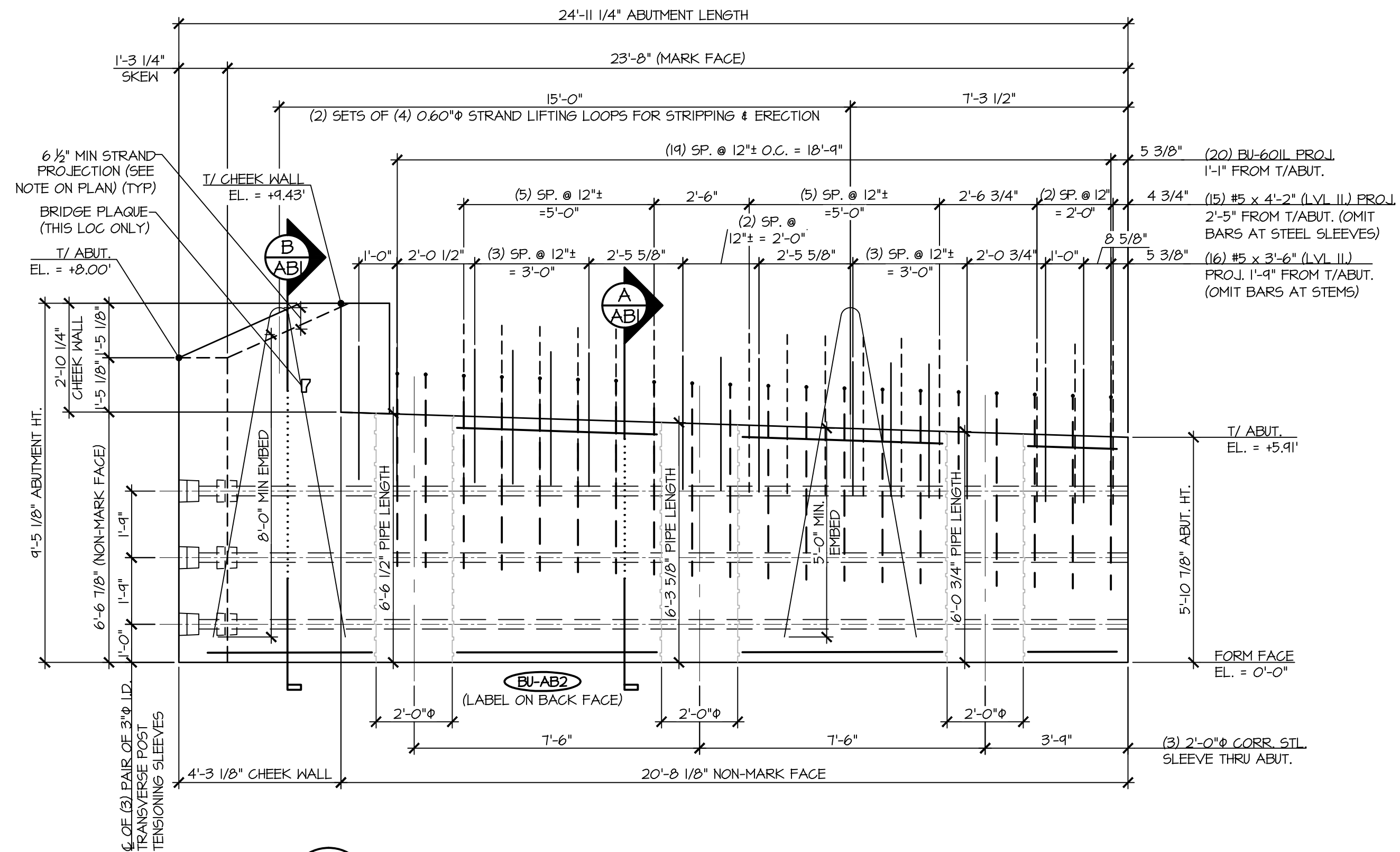
4
AB2
ABUTMENT REINFORCING NON-MARK FACE ELEVATION
3/8" = 1'-0"

MARK: BU-ABI		QTY.: 1	WT: 35.19T	VOL: 17.38 CY
MATERIAL LIST / ABUTMENT				
ITEM	MARK	DESCRIPTION		QTY.
1	BU-522	#5 BENT BAR (LEVEL I)		16
2	BU-523	#5 BENT BAR (LEVEL I)		5
3	BU-525	#5 BENT BAR (LEVEL I)		9
4	BU-526	#5 BENT BAR (LEVEL I)		4
5		#5 X 3'-6" (LEVEL II, DUAL COATED)		14
6		#5 x 4'-2" (LEVEL II, DUAL COATED)		16
7		#5 x 3'-4" (LEVEL I)		6
8	BU-601L	#6 BENT BAR (LEVEL II, DUAL COATED)		21
9	BU-602	#6 BENT BAR (LEVEL I)		6
10		#6 x 2'-4" (LEVEL I)		4
11		#6 x 3'-11" (LEVEL I)		32
12		#6 X 4'-0" (LEVEL I)		4
13		#6 X 4'-11" (LEVEL I)		4
14		#6 X 5'-2" (LEVEL I)		4
15		#6 x 5'-3" (LEVEL I)		8
16		#6 x 5'-5" (LEVEL I)		4
17		#6 x 7'-1" (LEVEL I)		10
18		#6 x 23'-3" (LEVEL I)		7
19		#6 x 24'-4" (LEVEL I)		7
20		2'-0" x 5'-4" CORR. STL. PIPE (GALV.)		1
21		2'-0" x 5'-7" CORR. STL. PIPE (GALV.)		1
22		2'-0" x 5'-9 7/8" CORR. STL. PIPE (GALV.)		1
23		SET OF (4) 0.60"Ø x 270 KSI STRAND LIFTING LOOPS		2

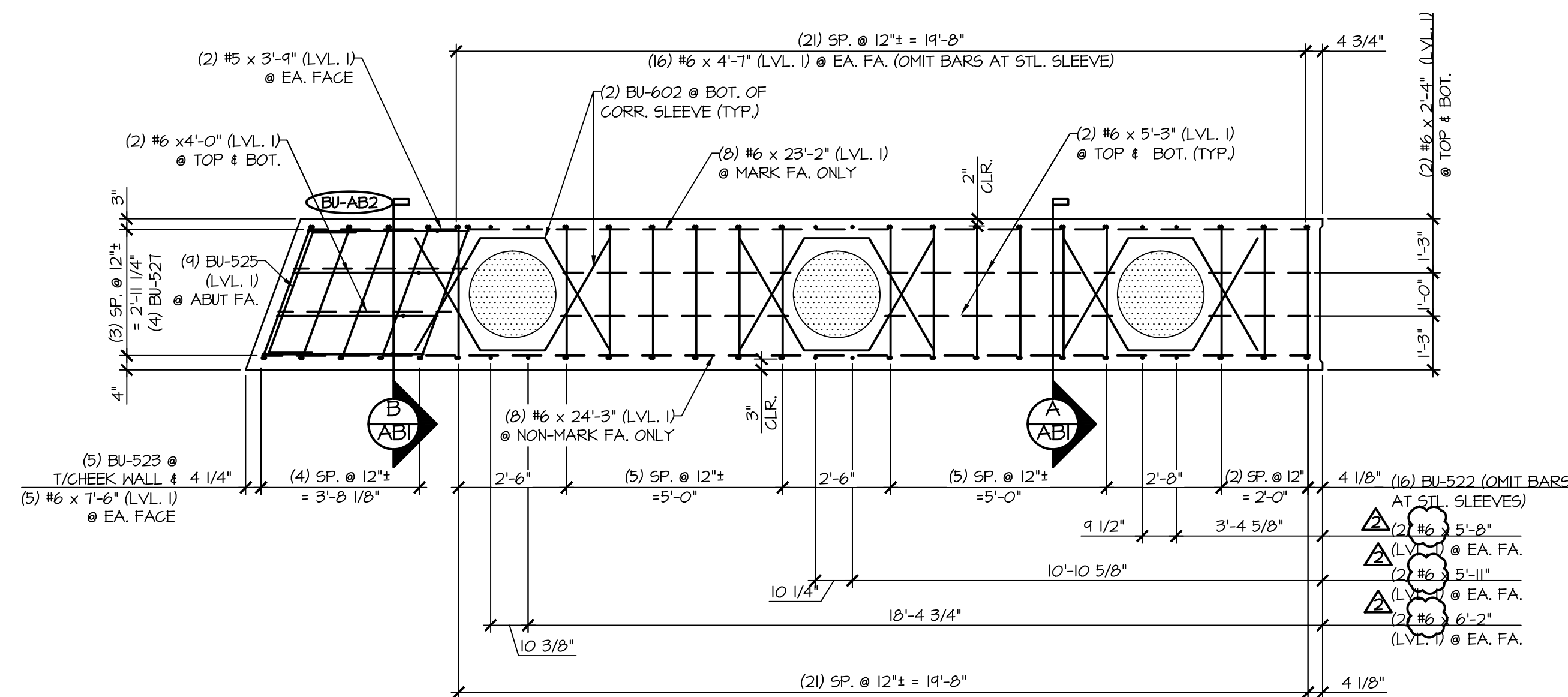
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 ONE STR. WOODBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		SCALE: NOTED	
	PRECAST ABUTMENT #1 DETAILS		CHKD: DFTM: JDK JOB NO: 23454-015 DWG. NO: AB2	



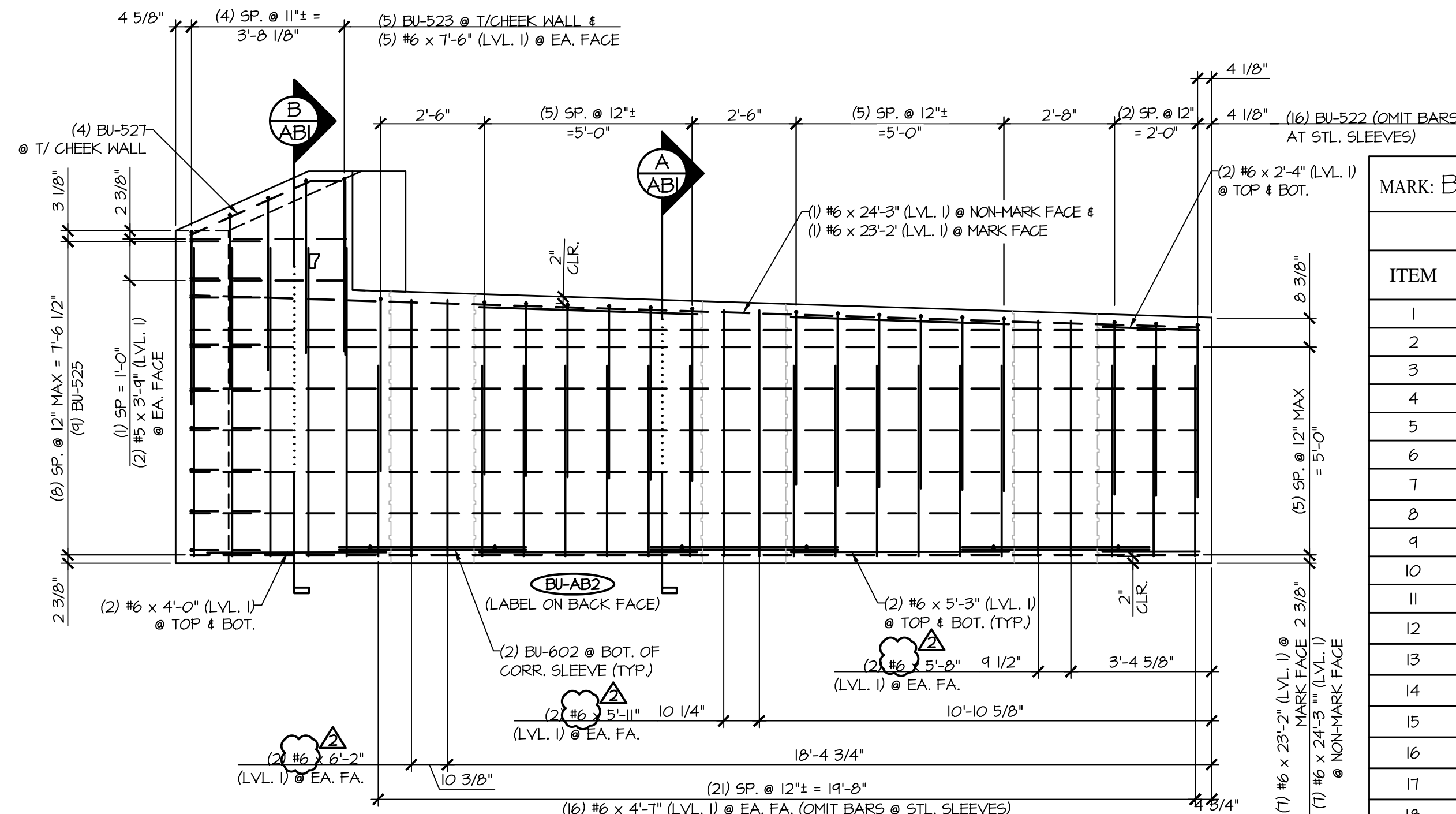
1
AB3
ABUTMENT DIMENSIONAL PLAN VIEW IN FORM
3/8" = 1'-0"



2
AB3
ABUTMENT DIMENSIONAL NON-MARK FACE ELEVATION
3/8" = 1'-0"



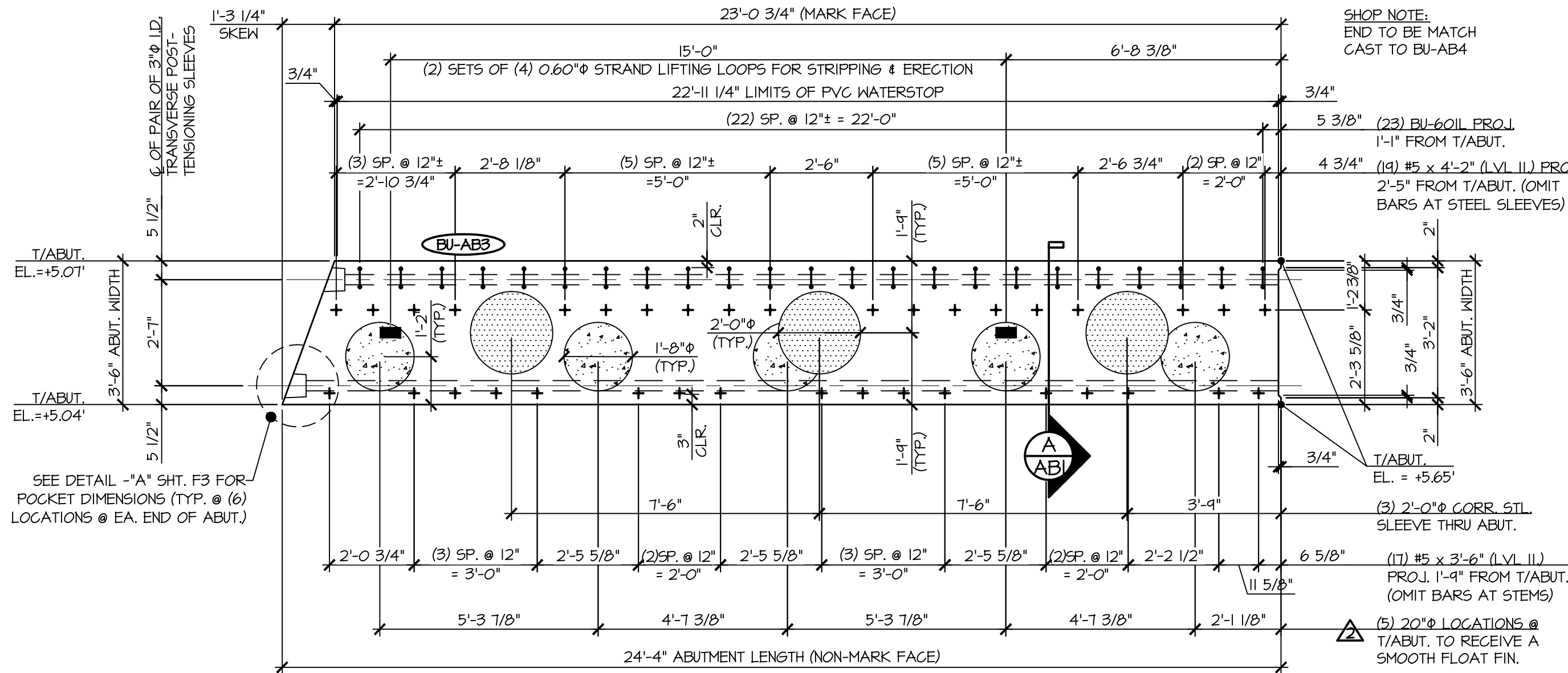
3
AB3
ABUTMENT REINFORCING PLAN VIEW IN FORM
3/8" = 1'-0"



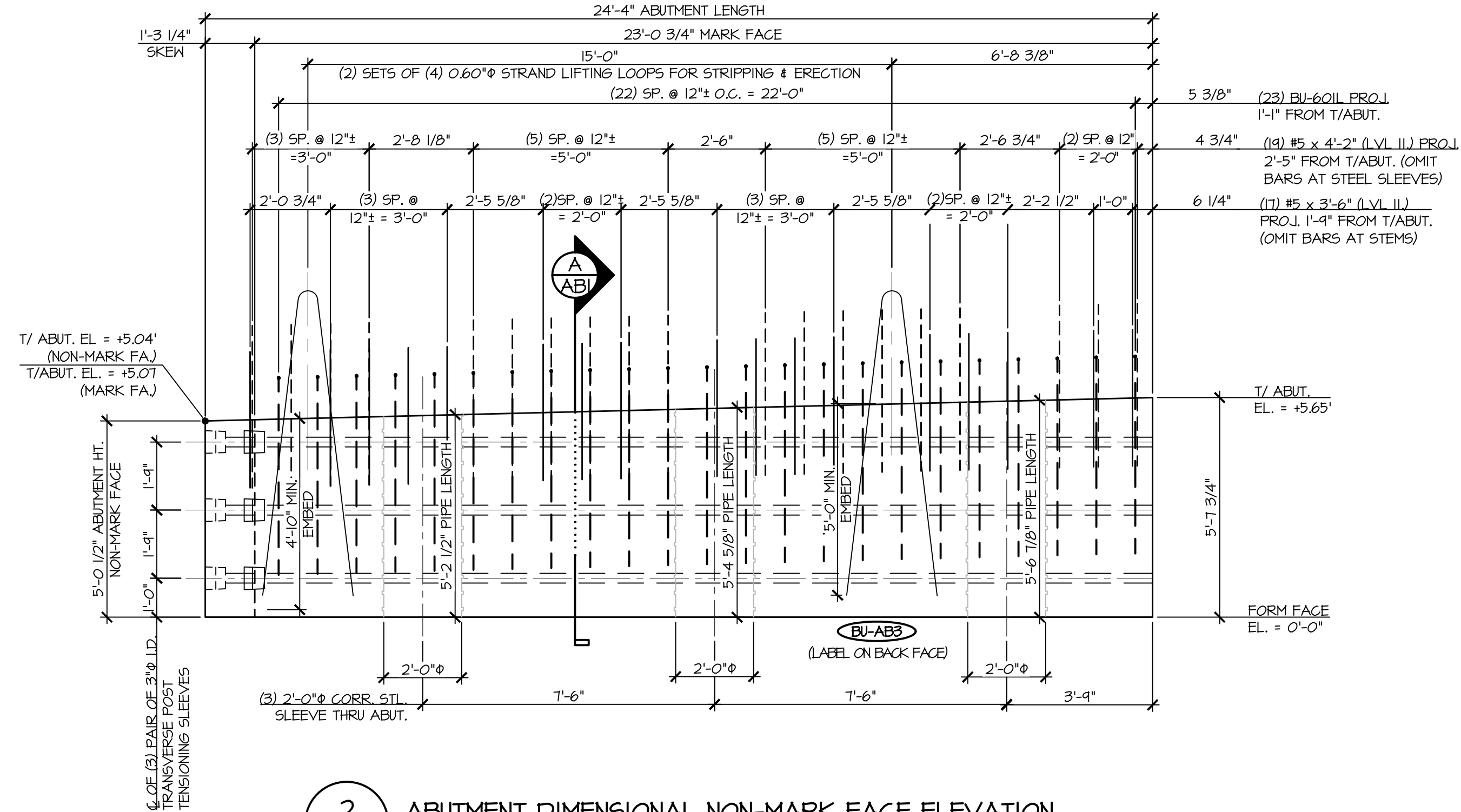
4
AB3
ABUTMENT REINFORCING NON-MARK FACE ELEVATION
3/8" = 1'-0"

MARK: BU-AB2		QTY.: 1	WT: 38.17T	VOL: 18.85 CY
MATERIAL LIST / ABUTMENT				
ITEM	MARK	DESCRIPTION	QTY.	
1	BU-522	#5 BENT BAR (LEVEL I)	16	
2	BU-523	#5 BENT BAR (LEVEL I)	5	
3	BU-525	#5 BENT BAR (LEVEL I)	9	
4	BU-527	#5 BENT BAR (LEVEL I)	4	
5		#5 X 3'-6" (LEVEL II, DUAL COATED)	16	
6		#5 X 4'-2" (LEVEL II, DUAL COATED)	15	
7		#5 X 3'-4" (LEVEL I)	4	
8	BU-601L	#6 BENT BAR (LEVEL II, DUAL COATED)	20	
9	BU-602	#6 BENT BAR (LEVEL I)	6	
10		#6 X 2'-4" (LEVEL I)	4	
11		#6 X 4'-0" (LEVEL I)	4	
12		#6 X 4'-7" (LEVEL I)	32	
13		#6 X 5'-3" (LEVEL I)	8	
14		#6 X 5'-8" (LEVEL I)	4	
15		#6 X 5'-11" (LEVEL I)	4	
16		#6 X 6'-2" (LEVEL I)	4	
17		#6 X 7'-6" (LEVEL I)	10	
18		#6 X 23'-2" (LEVEL I)	8	
19		#6 X 24'-3" (LEVEL I)	8	
20		2'-0" X 6'-0 3/4" CORR. STL. PIPE (GALV.)	1	
21		2'-0" X 6'-3 3/8" CORR. STL. PIPE (GALV.)	1	
22		2'-0" X 6'-6 1/2" CORR. STL. PIPE (GALV.)	1	
23		SET OF (4) 0.60"Ø X 270 KSI STRAND LIFTING LOOPS	2	

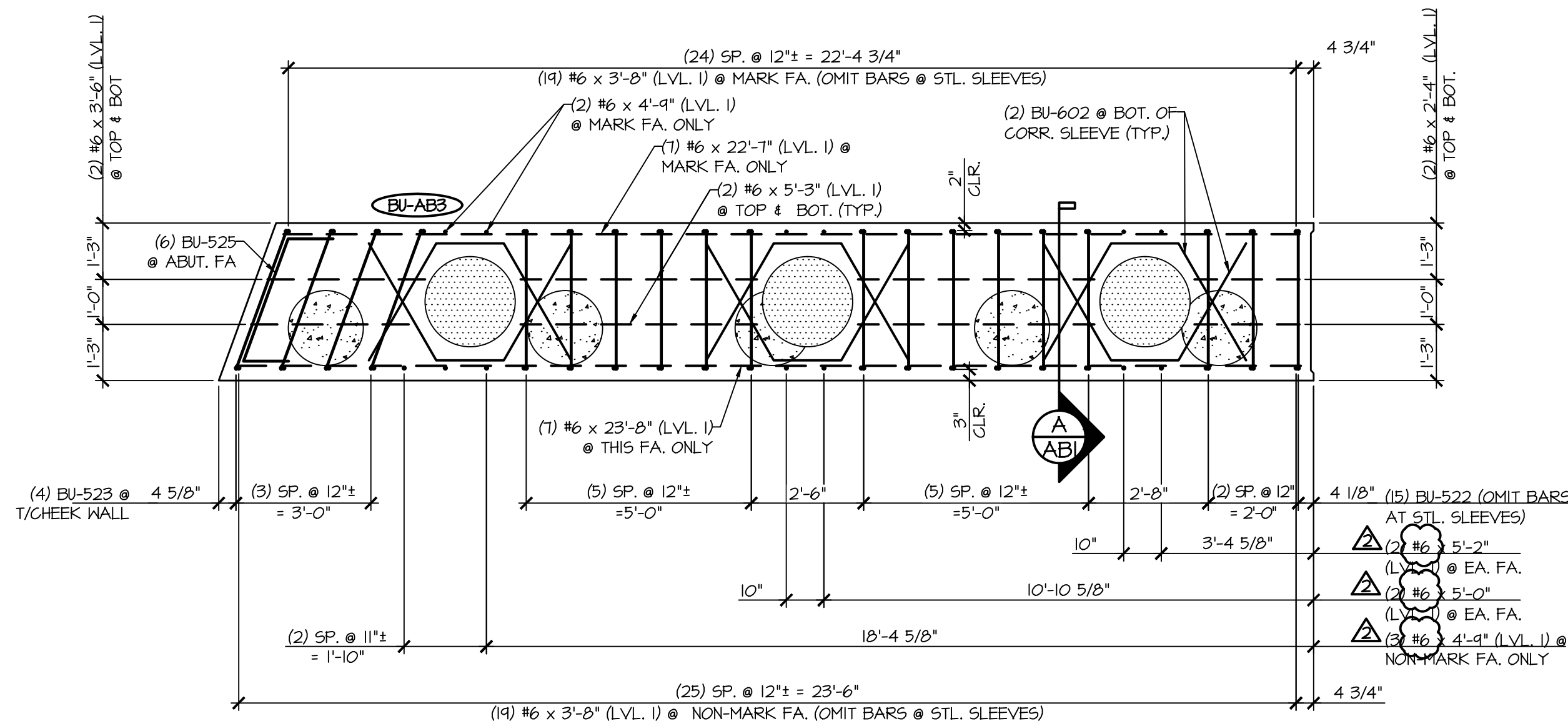
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE STR., MOORESBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRP 0269(13)		SCALE: NOTED	
	PRECAST ABUTMENT #2 DETAILS		CHKD: DFTM: JDK JOB NO: 23454-015	DWG. NO: AB3



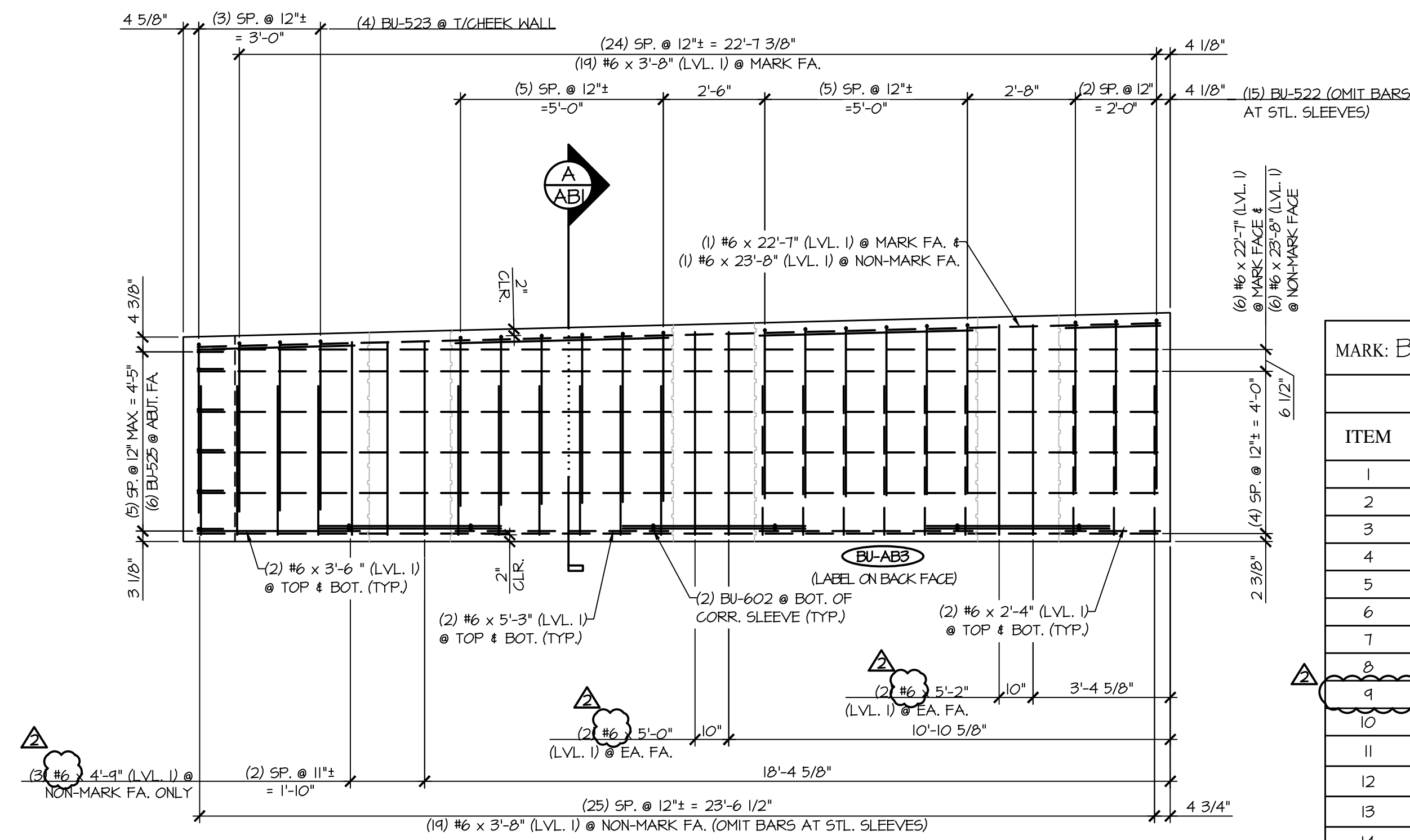
1
AB4 ABUTMENT DIMENSIONAL PLAN VIEW IN FORM
3/8" = 1'-0"



2
AB4 ABUTMENT DIMENSIONAL NON-MARK FACE ELEVATION
3/8" = 1'-0"



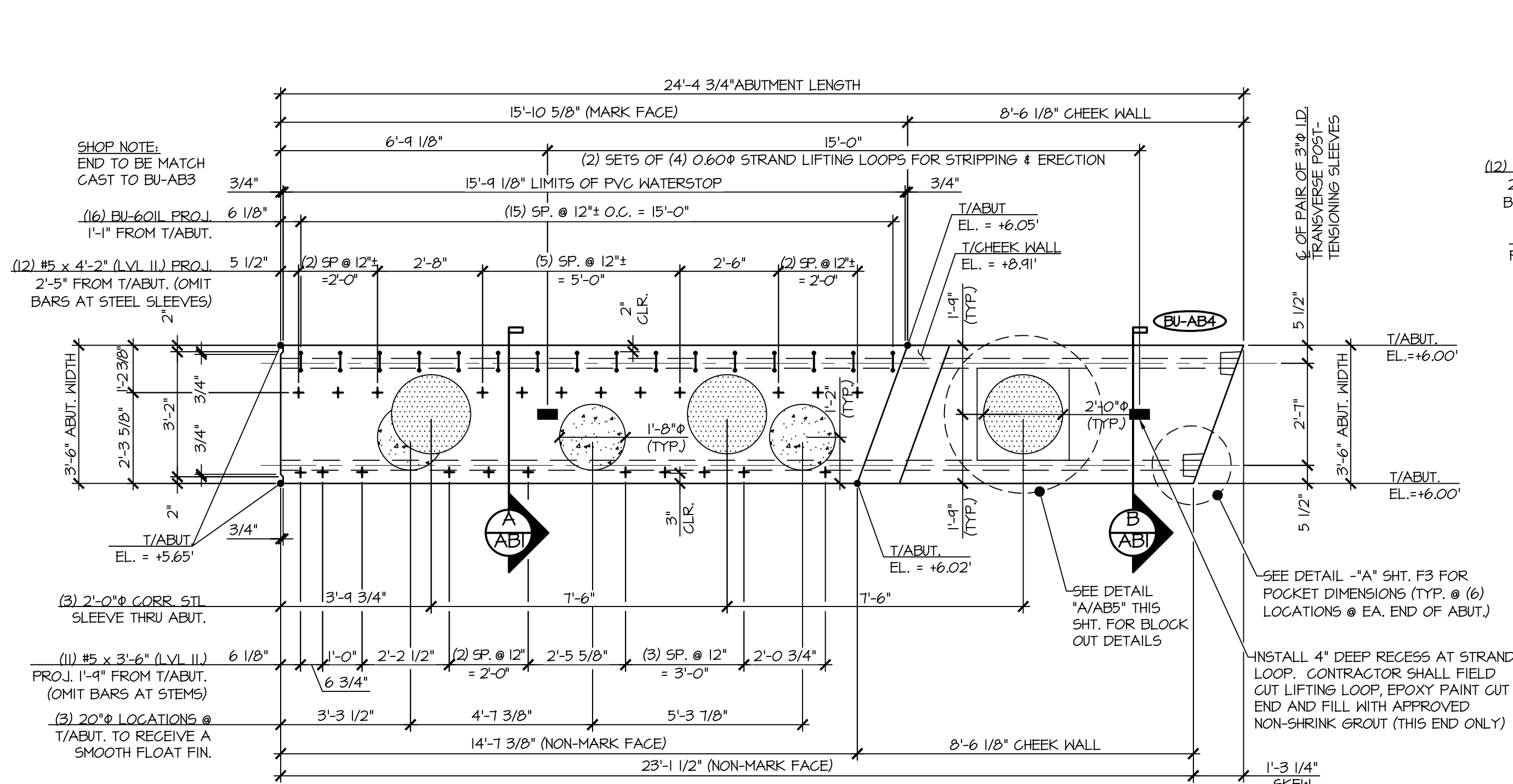
3
AB4 ABUTMENT REINFORCING PLAN VIEW IN FORM
3/8" = 1'-0"



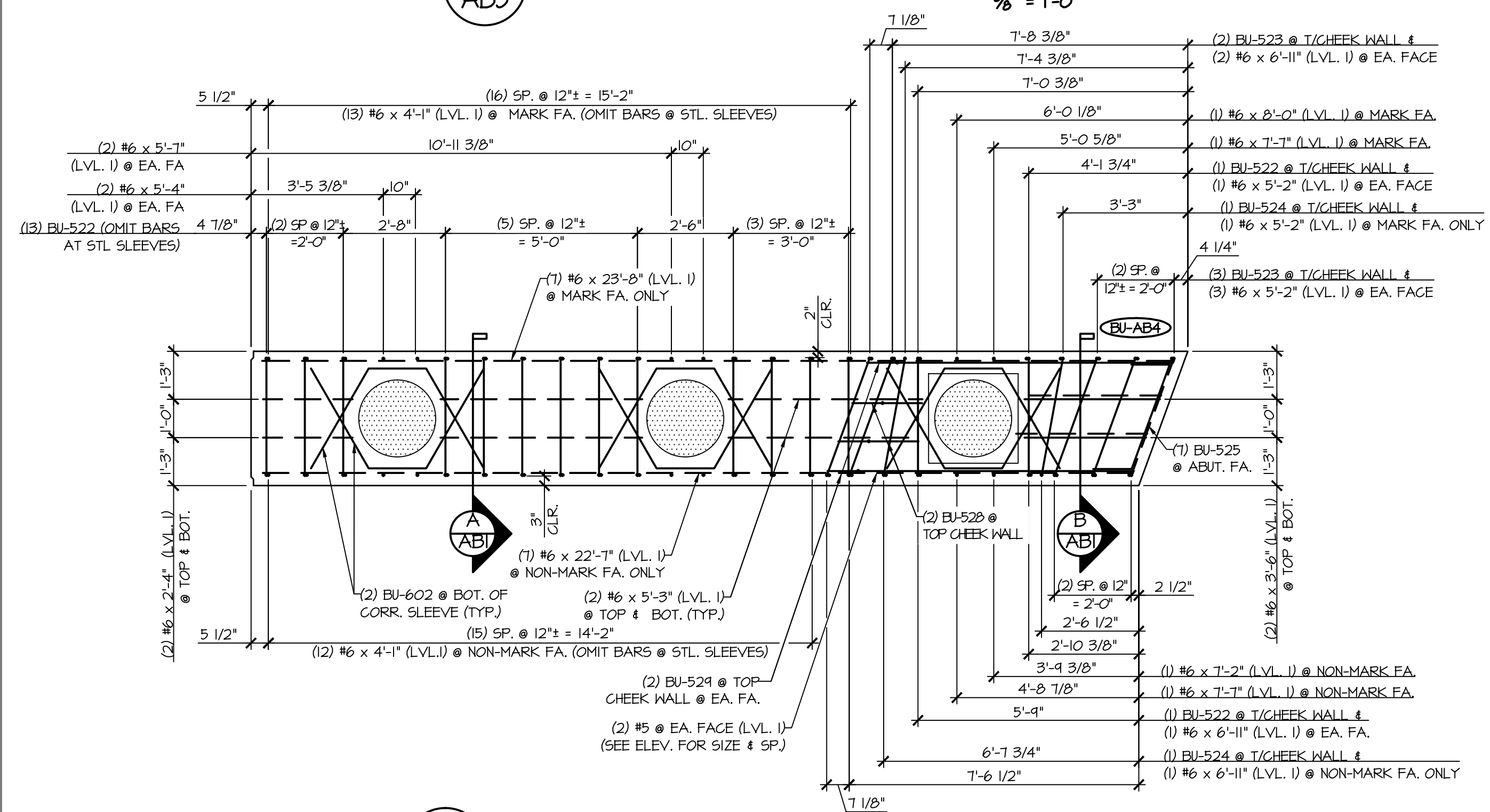
4
AB4 ABUTMENT REINFORCING NON-MARK FACE ELEVATION
3/8" = 1'-0"

MARK: BU-AB3		QTY.: 1	WT: 29.43T	VOL: 14.53 CY
MATERIAL LIST / ABUTMENT				
ITEM	MARK	DESCRIPTION		QTY.
1	BU-522	#5 BENT BAR (LEVEL I)		15
2	BU-523	#5 BENT BAR (LEVEL I)		4
3	BU-525	#5 BENT BAR (LEVEL I)		6
4		#5 x 3'-6" (LEVEL II, DUAL COATED)		17
5		#5 x 4'-2" (LEVEL II, DUAL COATED)		19
6	BU-60IL	#6 BENT BAR (LEVEL II, DUAL COATED)		23
7	BU-602	#6 BENT BAR (LEVEL I)		6
8		#6 x 2'-4" (LEVEL I)		4
9		#6 x 3'-6" (LEVEL I)		4
10		#6 x 3'-8" (LEVEL I)		38
11		#6 x 4'-9" (LEVEL I)		5
12		#6 x 5'-0" (LEVEL I)		4
13		#6 x 5'-2" (LEVEL I)		4
14		#6 x 5'-3" (LEVEL I)		8
15		#6 x 22'-7" (LEVEL I)		7
16		#6 x 23'-8" (LEVEL I)		7
17		2'-0" x 5'-2 1/2" CORR. STL. PIPE (GALV.)		1
18		2'-0" x 5'-4 3/8" CORR. STL. PIPE (GALV.)		1
19		2'-0" x 5'-6 7/8" CORR. STL. PIPE (GALV.)		1
20		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS		2

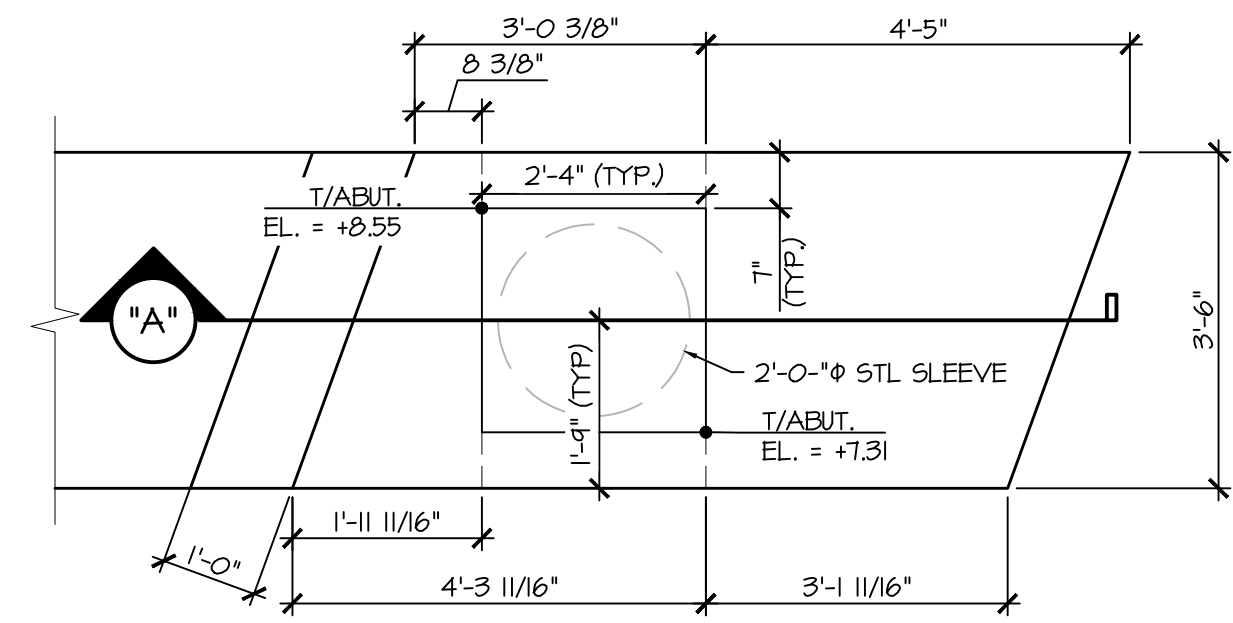
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE ST., MOORESBURY, VERMONT 05753 Phone: (802) 388-6361 Fax: (802) 388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRP 0269(13)		SCALE: NOTED	
	PRECAST ABUTMENT #3 DETAILS		CHKD: DFTM: JOK JOB NO: 23454-015	DWG. NO: AB4



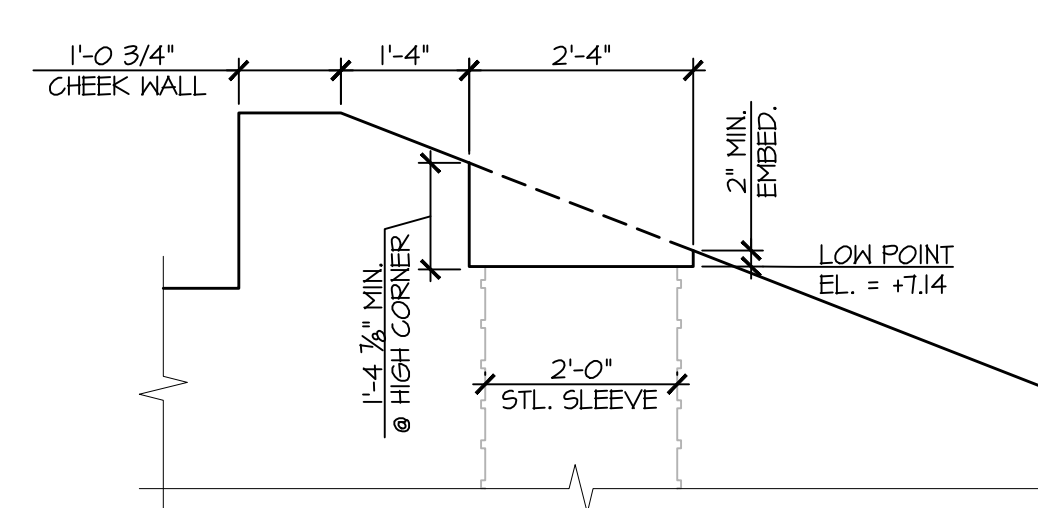
1
AB5
ABUTMENT DIMENSIONAL PLAN VIEW IN FORM
3/8\"/>



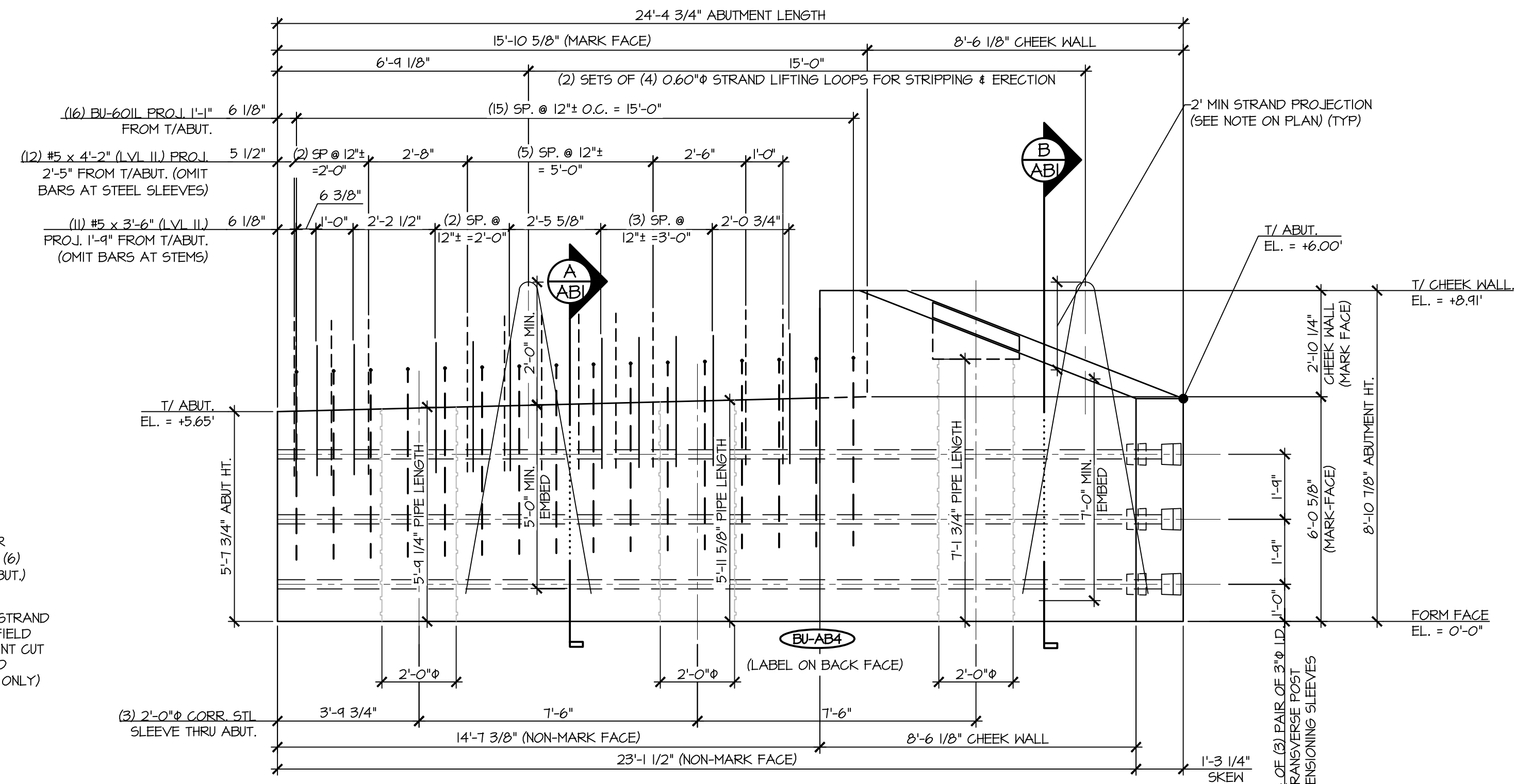
3
AB5
ABUTMENT REINFORCING PLAN VIEW IN FORM
3/8\"/>



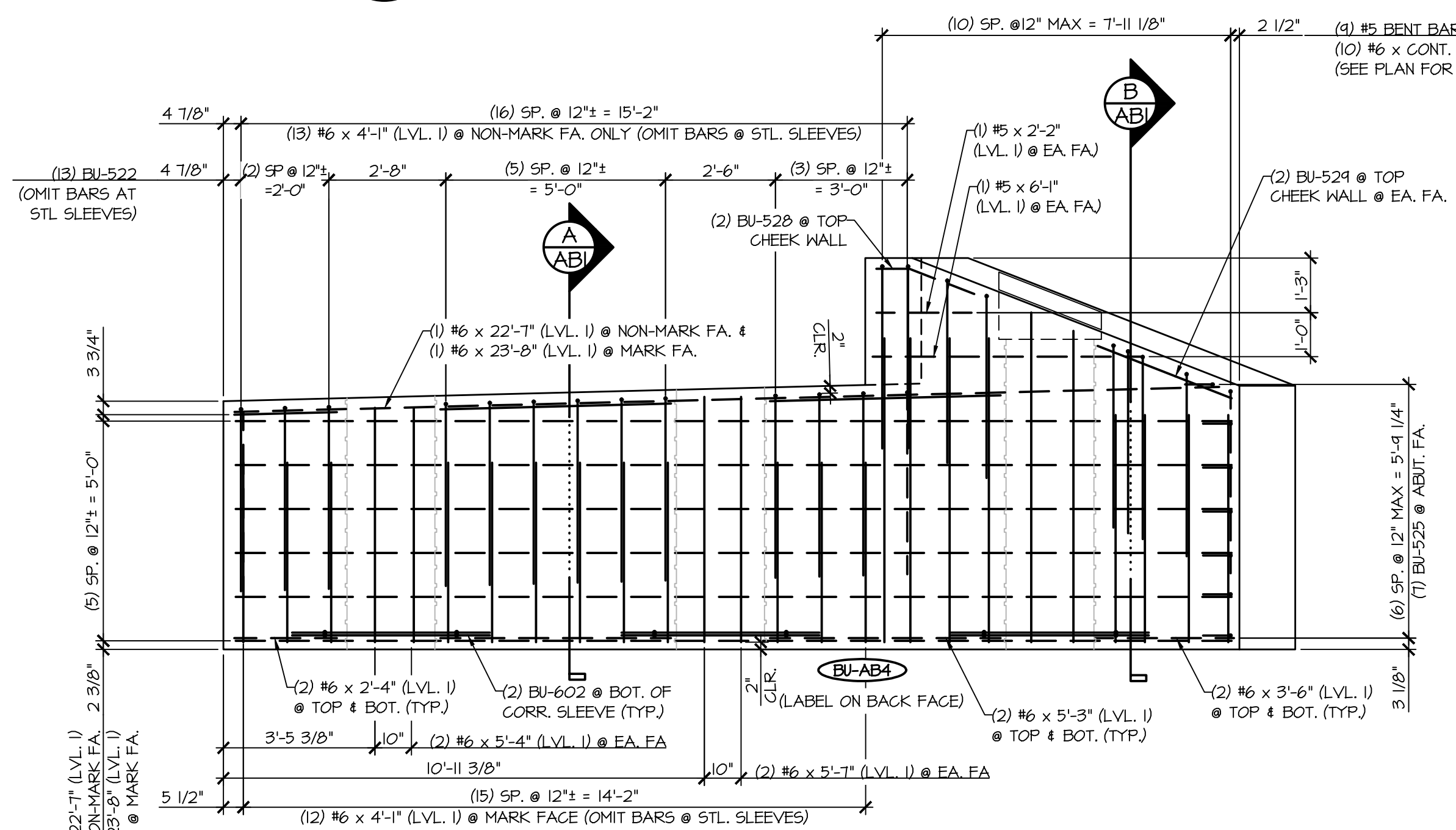
A
AB5
BLOCK OUT DETAILS
1/2\"/>



SECTION 'A'



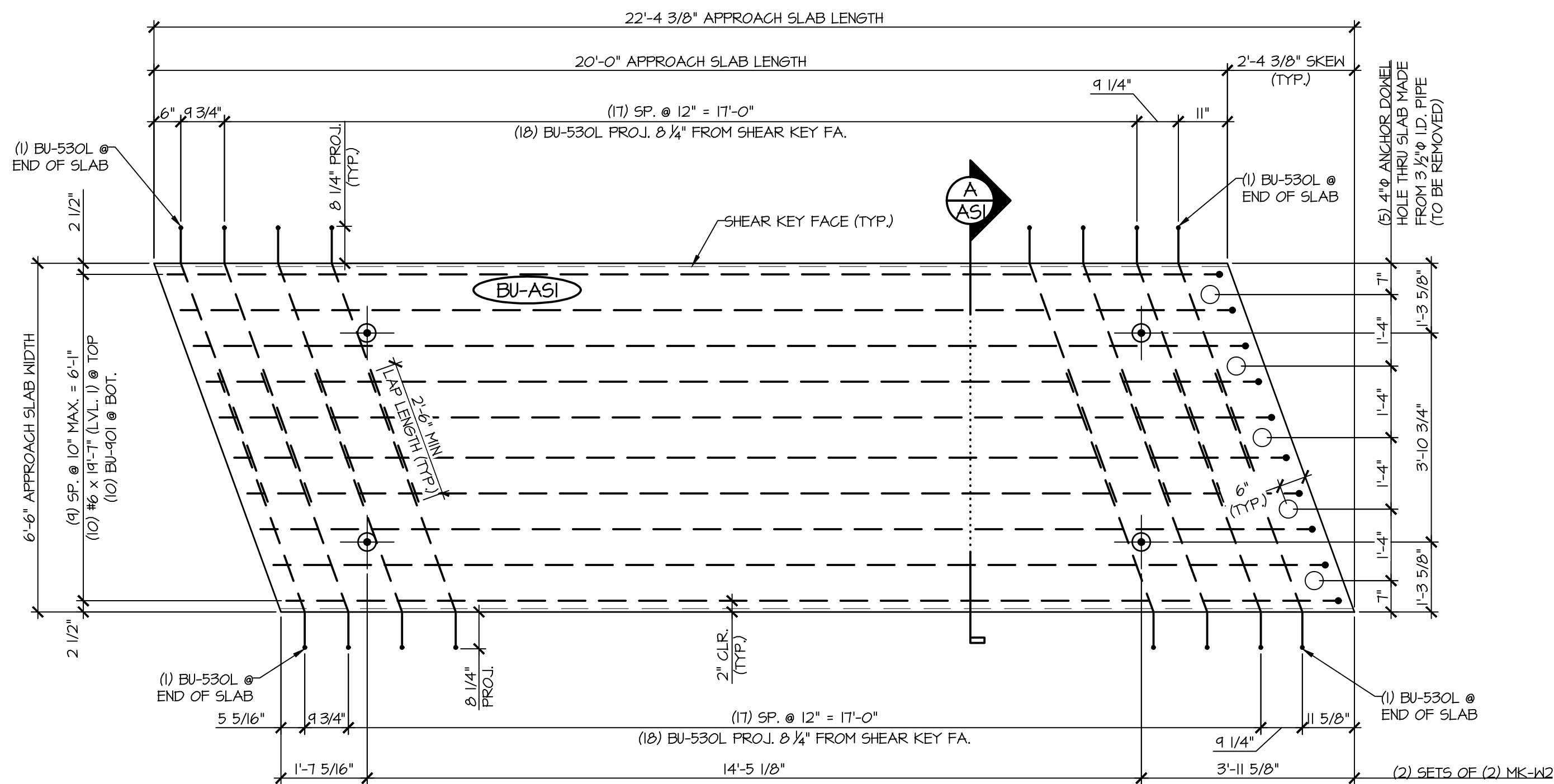
2
AB5
ABUTMENT DIMENSIONAL NON-MARK FACE ELEVATION



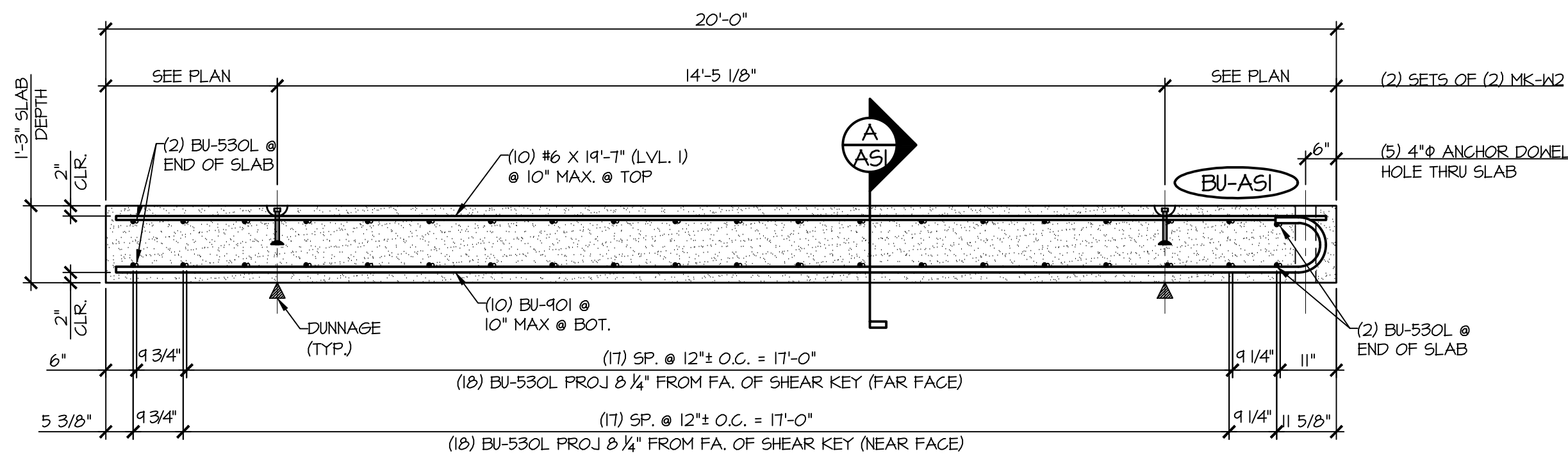
4
AB5
ABUTMENT REINFORCING NON-MARK FACE ELEVATION
3/8\"/>

MARK: BU-AB4	QTY: 1	WT: 35.82T	VOL: 17.69 CY
MATERIAL LIST / ABUTMENT			
ITEM	MARK	DESCRIPTION	QTY.
1	BU-522	#5 BENT BAR (LEVEL I)	15
2	BU-523	#5 BENT BAR (LEVEL I)	5
3	BU-524	#5 BENT BAR (LEVEL I)	2
4	BU-525	#5 BENT BAR (LEVEL I)	7
5	BU-526	#5 BENT BAR (LEVEL I)	2
6	BU-529	#5 BENT BAR (LEVEL I)	2
7		#5 x 2'-2" (LEVEL I)	2
8		#5 x 3'-6" (LEVEL II, DUAL COATED)	11
9		#5 x 4'-2" (LEVEL II, DUAL COATED)	12
10		#5 x 6'-1" (LEVEL I)	2
11	BU-601L	#6 BENT BAR (LEVEL II, DUAL COATED)	16
12	BU-602	#6 BENT BAR (LEVEL I)	6
13		#6 x 2'-4" (LEVEL I)	4
14		#6 x 3'-6" (LEVEL I)	4
15		#6 x 4'-1" (LEVEL I)	25
16		#6 x 5'-2" (LEVEL I)	9
17		#6 x 5'-3" (LEVEL I)	8
18		#6 x 5'-4" (LEVEL I)	4
19		#6 x 5'-7" (LEVEL I)	4
20		#6 x 6'-11" (LEVEL I)	7
21		#6 x 7'-2" (LEVEL I)	1
22		#6 x 7'-7" (LEVEL I)	2
23		#6 x 8'-0" (LEVEL I)	1
24		#6 x 22'-7" (LEVEL I)	7
25		#6 x 23'-8" (LEVEL I)	7
26		2'-0" x 5'-4 1/4" CORR. STL. PIPE (GALV.)	1
27		2'-0" x 5'-11 3/8" CORR. STL. PIPE (GALV.)	1
28		2'-0" x 7'-1 3/4" CORR. STL. PIPE (GALV.)	1
29		SET OF 4 0.600" x 270 KSI STRAND LIFTING LOOPS	2

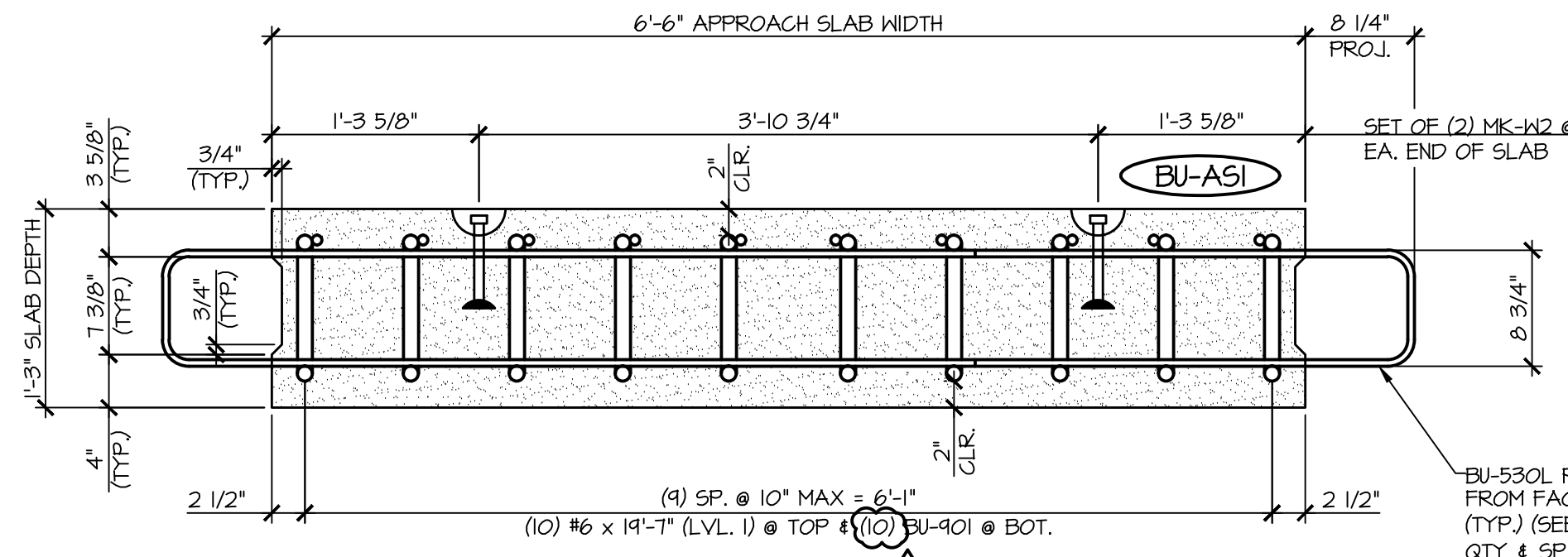
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 ONE STR. MIDDLEBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		SCALE: NOTED	
	PRECAST ABUTMENT #4 DETAILS		CHKD: DFTM: JDK JOB NO: 23454-015 DWG. NO: AB5	



1 PLAN VIEW IN FORM
ASI
1/2" = 1'-0"

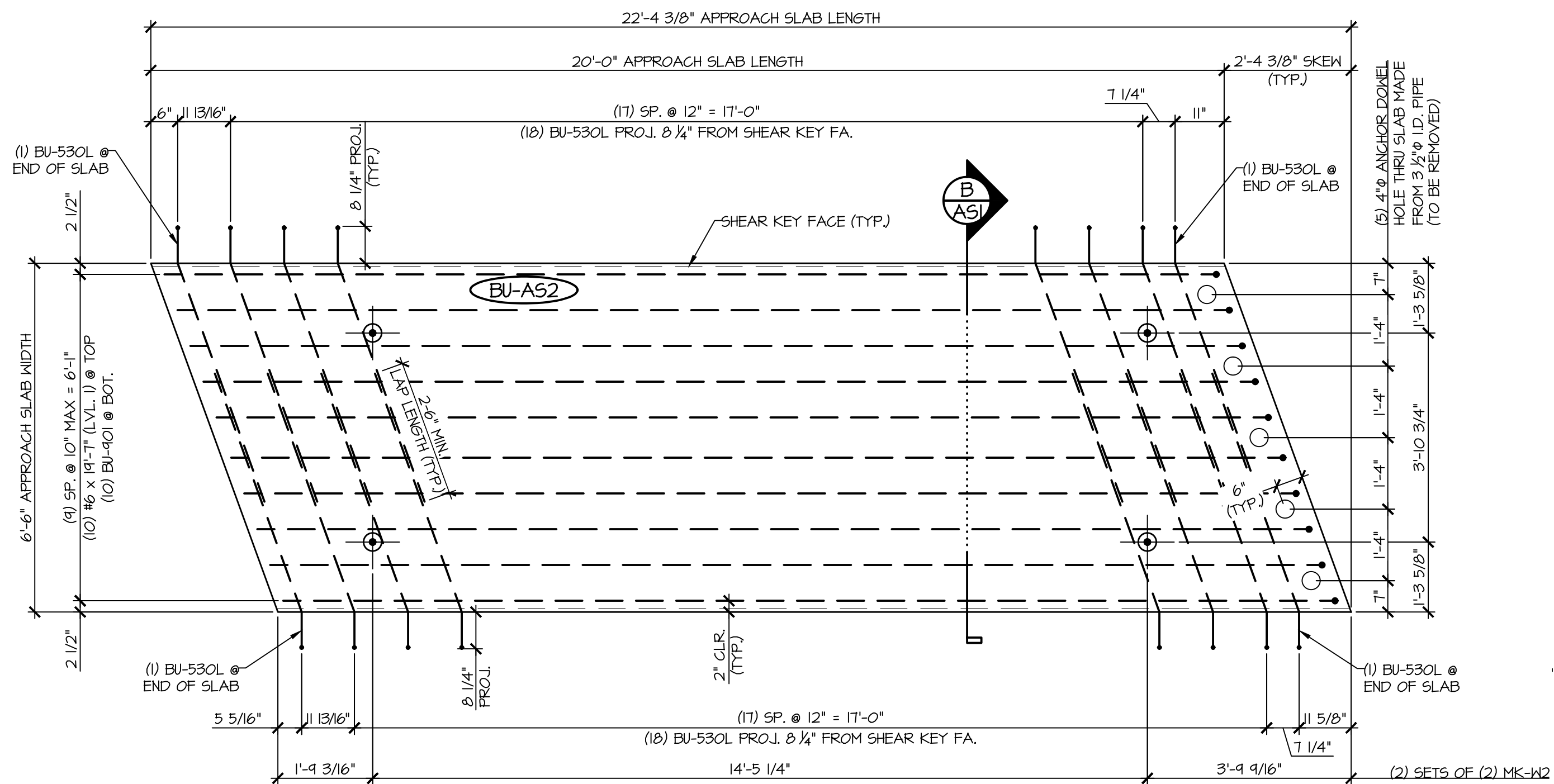


2 LONGITUDINAL SECTION
ASI
1/2" = 1'-0"

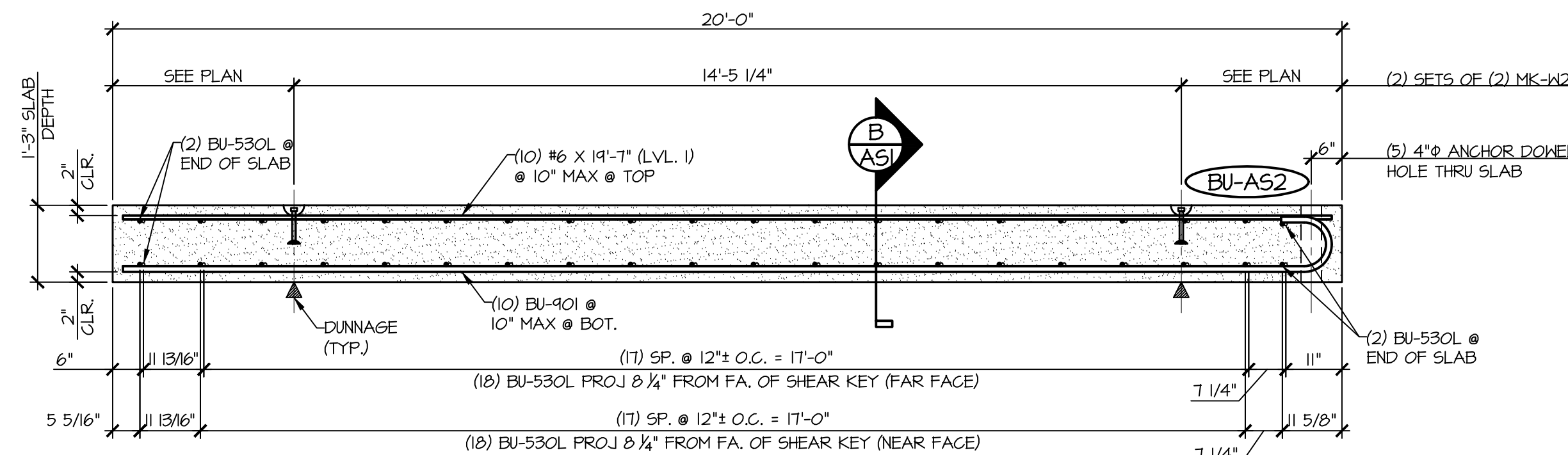


A APPROACH SLAB SECTION
ASI
1" = 1'-0"

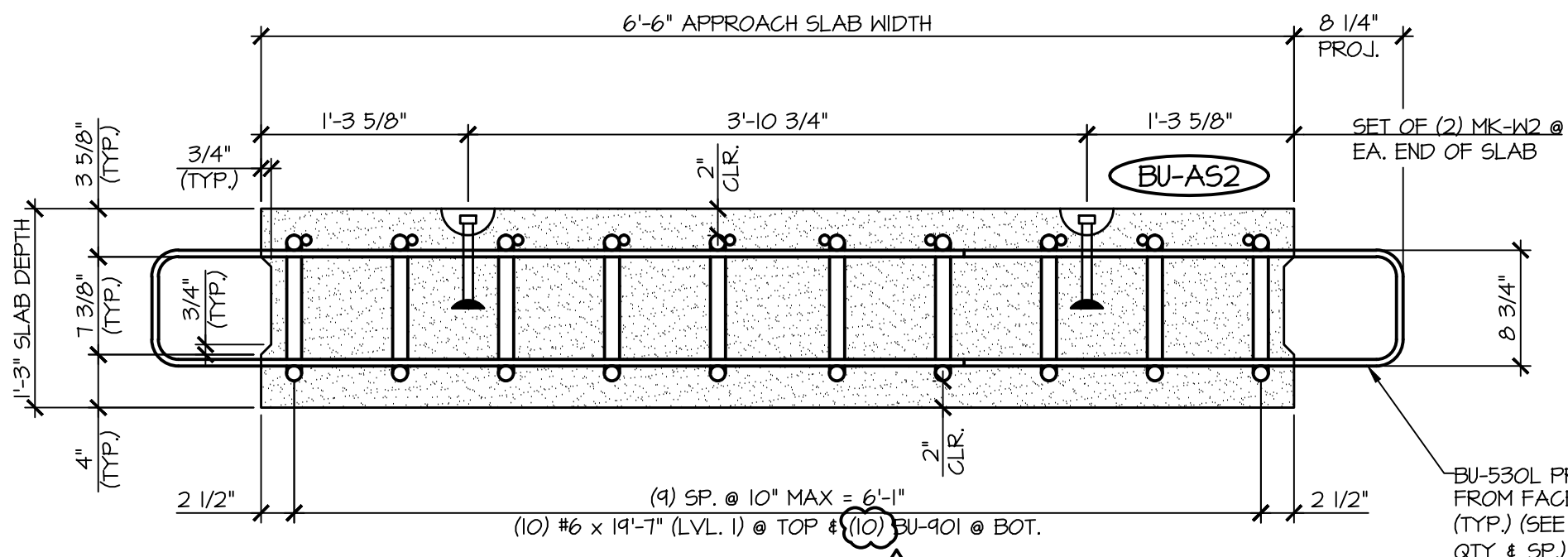
MARK: BU-ASI	QTY.: 2	WT: 12.09T	VOL: 5.97 CY
MATERIAL LIST / APPROACH SLAB			
ITEM	MARK	DESCRIPTION	QTY.
1	BU-530L	#5 BENT BAR (LEVEL II, DUAL COATED)	40
2		#6 x 19'-7" (LEVEL I)	10
3	BU-901	#1 BENT BAR (LEVEL I)	10
4	MK-W2	4T x 7 1/8" SHIFIT LIFT LIFTER	4



3 PLAN VIEW IN FORM
ASI
1/2" = 1'-0"



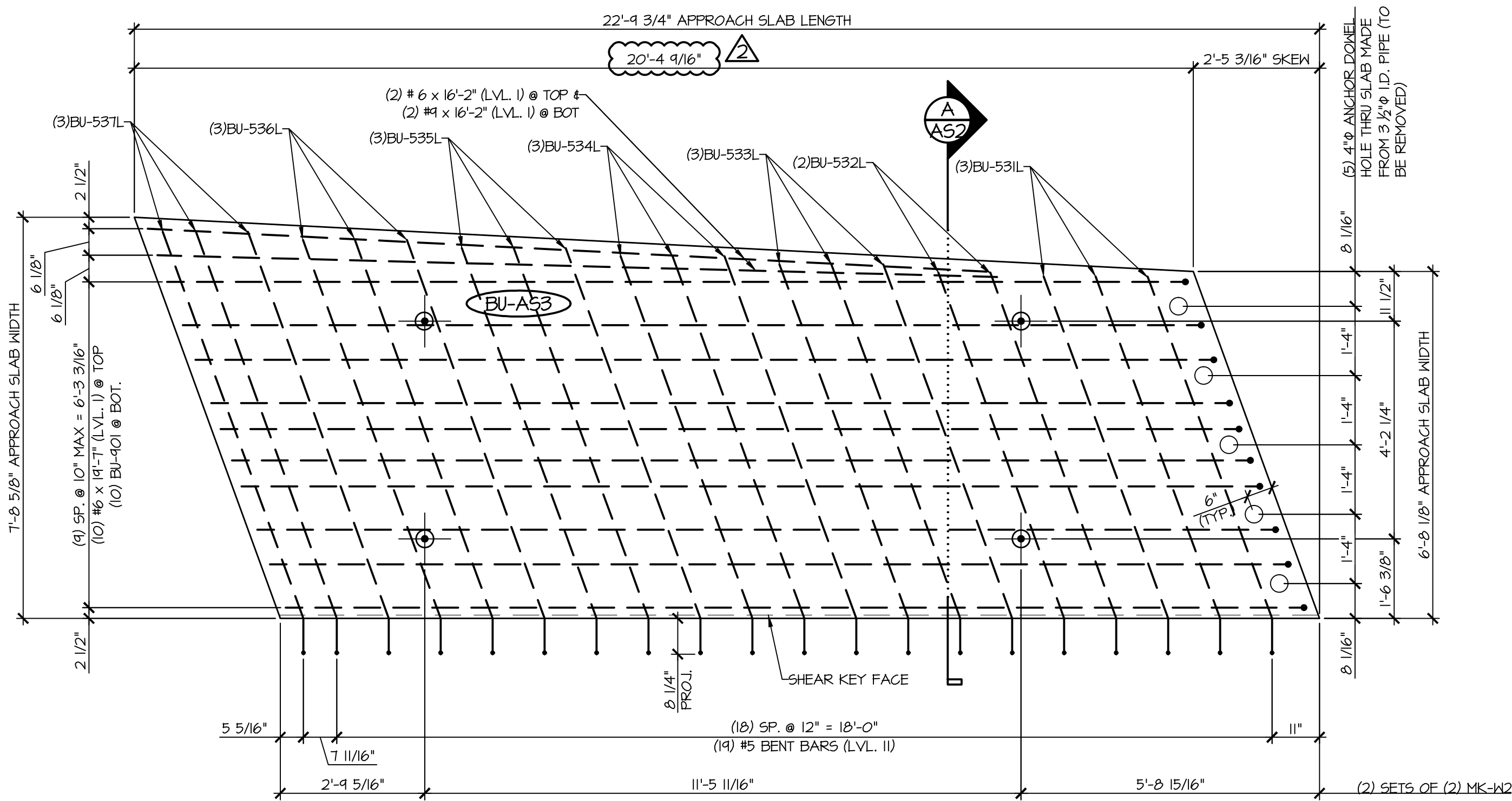
4 LONGITUDINAL SECTION
ASI
1/2" = 1'-0"



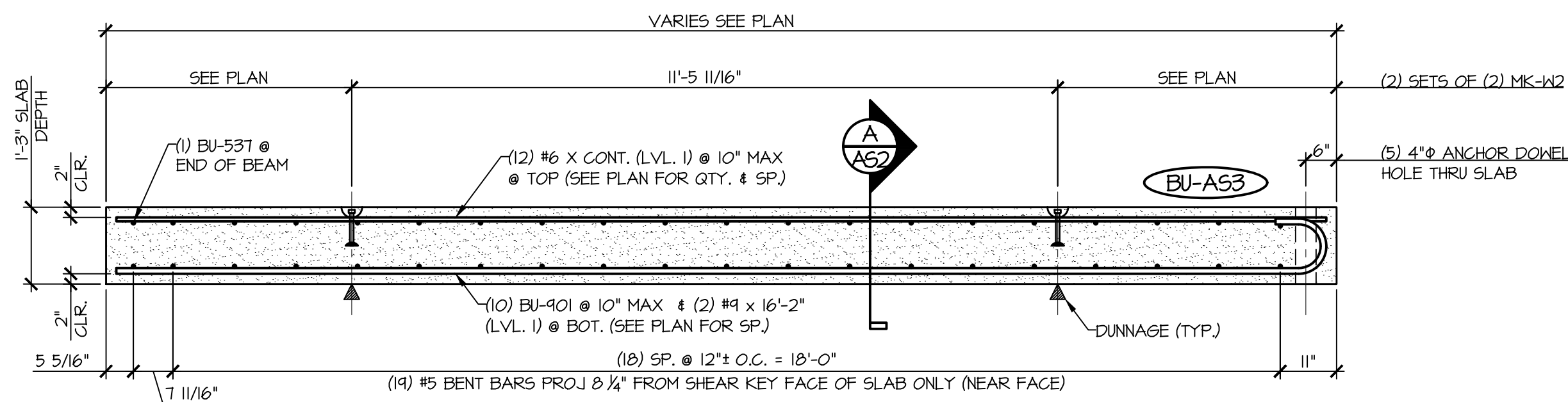
A APPROACH SLAB SECTION
ASI
1" = 1'-0"

MARK: BU-AS2	QTY.: 2	WT: 12.09T	VOL: 5.97 CY
MATERIAL LIST / APPROACH SLAB			
ITEM	MARK	DESCRIPTION	QTY.
1	BU-530L	#5 BENT BAR (LEVEL II, DUAL COATED)	40
2		#6 x 19'-7" (LEVEL I)	10
3	BU-901	#1 BENT BAR (LEVEL I)	10
4	MK-W2	4T x 7 1/8" SHIFIT LIFT LIFTER	4

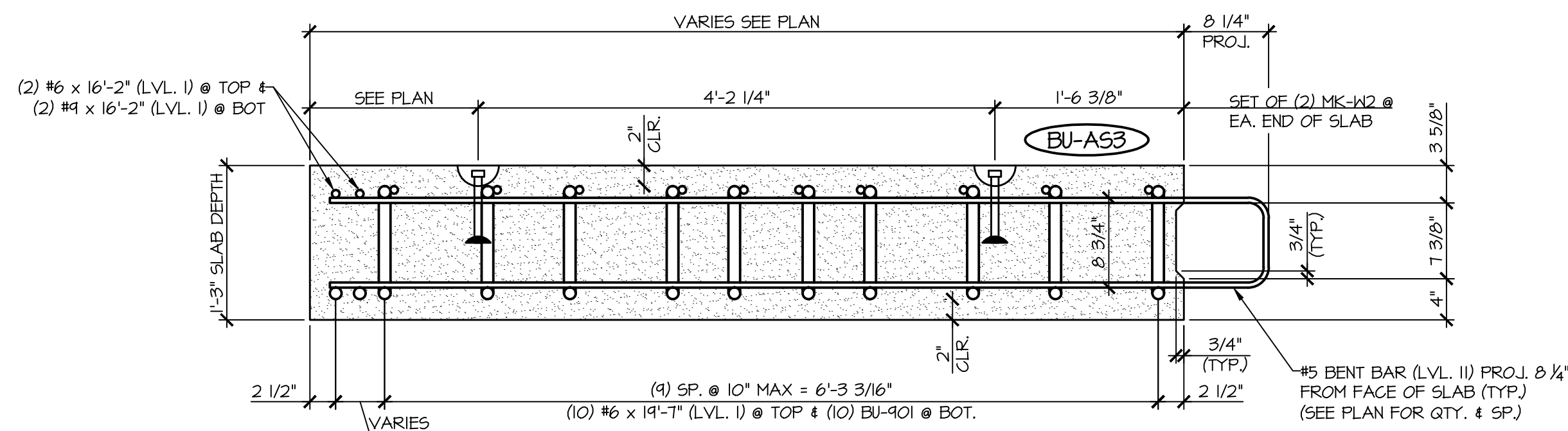
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CAGE STR., MIDDLEBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		SCALE: NOTED	CHKD: DFTM: JDK
	PRECAST APPROACH SLAB DETAILS		JOB NO: 23454-015	DWG. NO: ASI



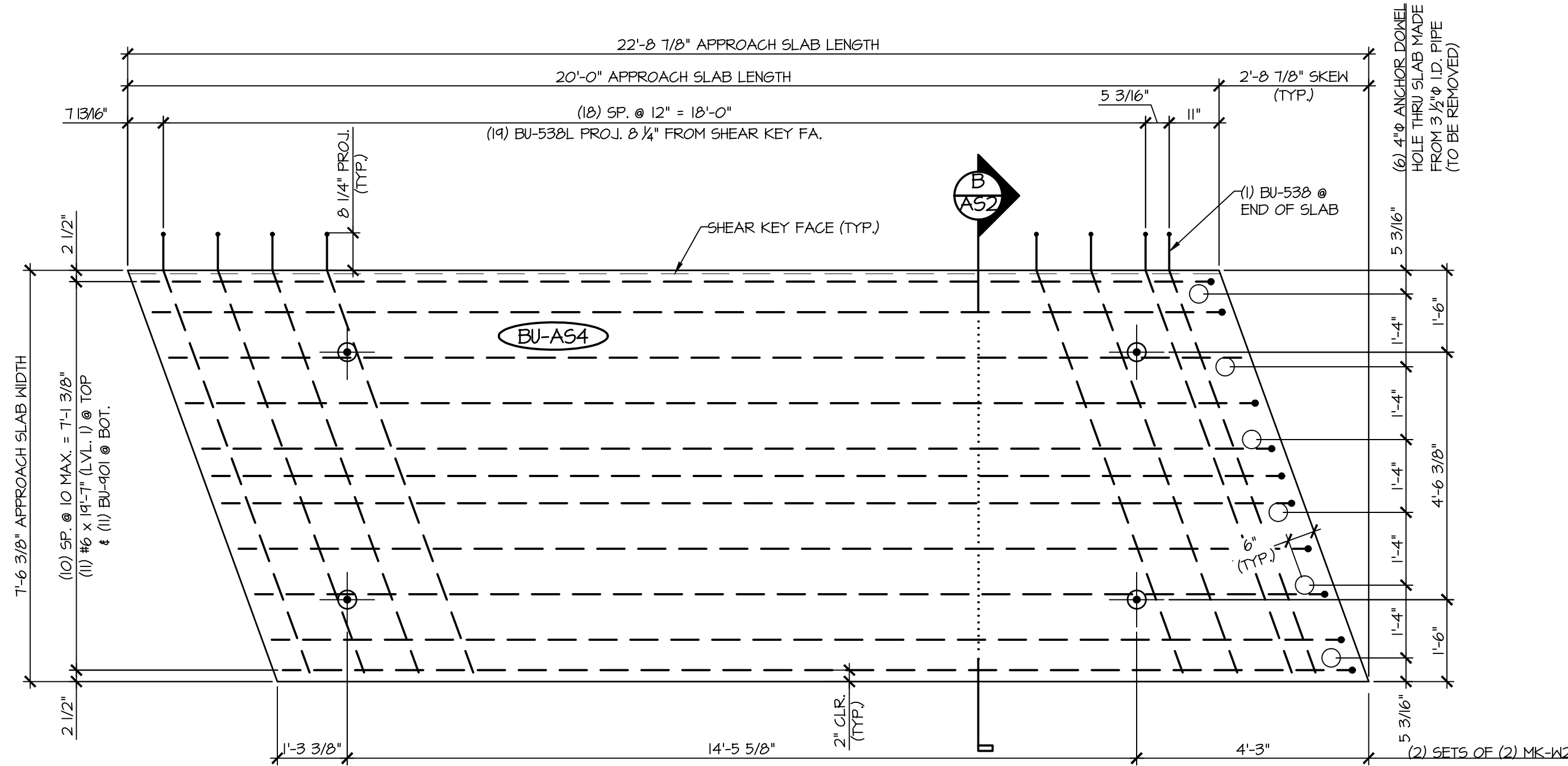
1
A52
PLAN VIEW IN FORM
1/2" = 1'-0"



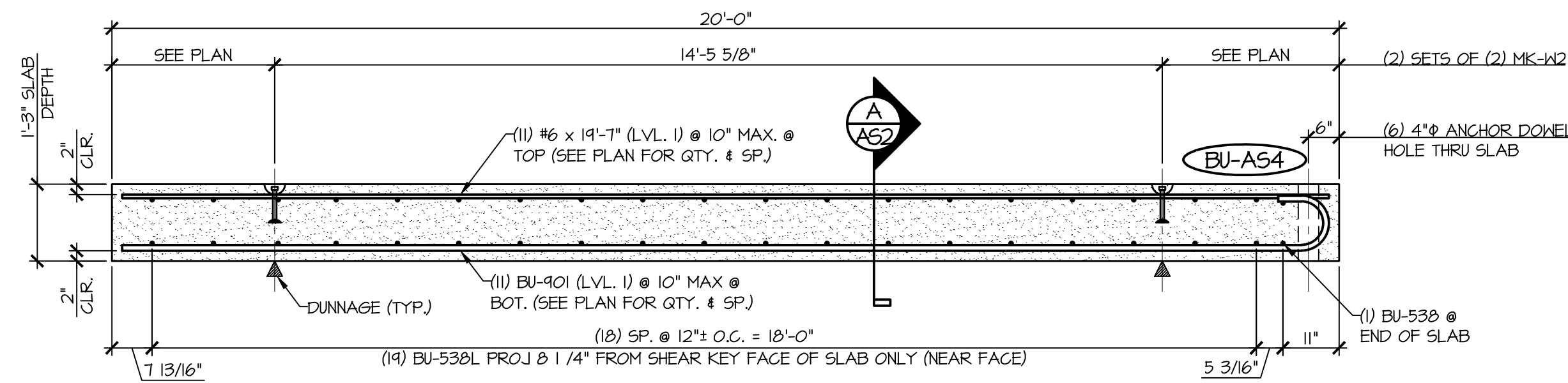
2
A52
LONGITUDINAL SECTION
1/2" = 1'-0"



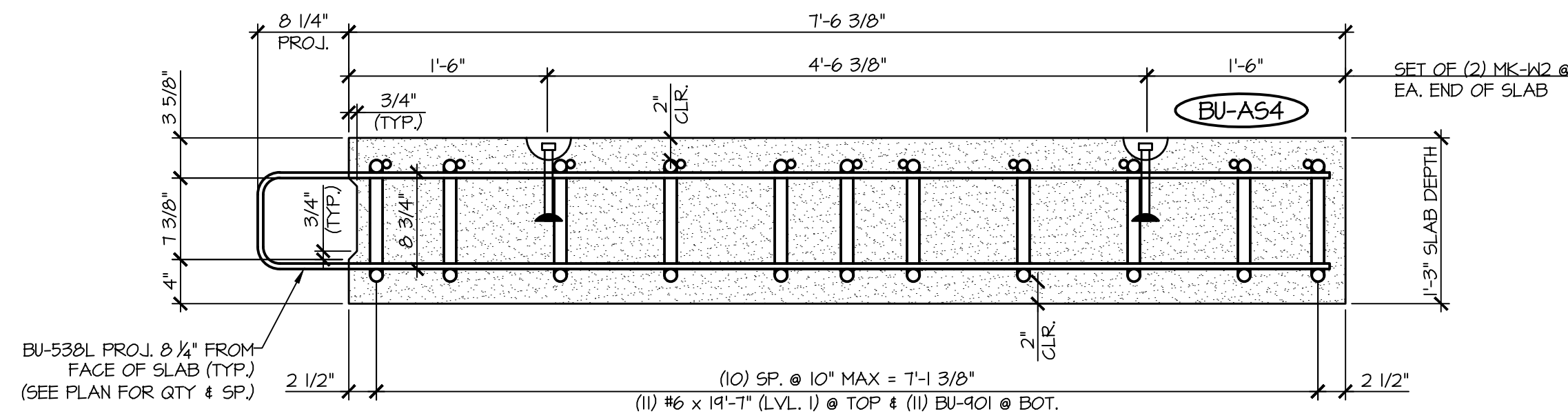
A
A52
APPROACH SLAB SECTION
1" = 1'-0"



3
A52
PLAN VIEW IN FORM
1/2" = 1'-0"



4
A52
LONGITUDINAL SECTION
1/2" = 1'-0"



B
A52
APPROACH SLAB SECTION
1" = 1'-0"

MARK: BU-A53		QTY.: 1	WT: 13.45T	VOL: 6.64 CY
MATERIAL LIST / APPROACH SLAB				
ITEM	MARK	DESCRIPTION		QTY.
1	BU-531L	#5 BENT BAR (LEVEL II, DUAL COATED)		3
2	BU-532L	#5 BENT BAR (LEVEL II, DUAL COATED)		2
3	BU-533L	#5 BENT BAR (LEVEL II, DUAL COATED)		3
4	BU-534L	#5 BENT BAR (LEVEL II, DUAL COATED)		3
5	BU-535L	#5 BENT BAR (LEVEL II, DUAL COATED)		3
6	BU-536L	#5 BENT BAR (LEVEL II, DUAL COATED)		3
7	BU-537L	#5 BENT BAR (LEVEL II, DUAL COATED)		3
8		#6 x 19'-7" (LEVEL I)		10
9		#6 x 16'-2" (LEVEL I)		2
10	BU-901	#4 BENT BAR (LEVEL I)		10
11		#4 x 16'-2" (LEVEL I)		2
12	MK-W2	4T x 7 1/8" SWIFT LIFT LIFTER		4

MARK: BU-A54	QTY.: 1	WT: 14.07T	VOL: 6.95 CY
MATERIAL LIST / APPROACH SLAB			
ITEM	MARK	DESCRIPTION	QTY.
1	BU-538	#5 BENT BAR (LEVEL II, DUAL COATED)	20
2		#6 x 19'-7" (LEVEL I)	11
3	BU-901	#4 BENT BAR (LEVEL I)	11
4	MK-W2	4T x 7 1/8" SWIFT LIFT LIFTER	4

APPROVAL STAMP:

J.P. CARRARA & SONS INC.
Precast & Prestress Manufacturer
2464 CASE STR., MOORESBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010

T. BUCK CONSTRUCTION, INC.
CONTRACTOR
AUBURN, MAINE

STATE OF VERMONT AGENCY OF TRANSPORTATION
COUNTY OF CALEDONIA

DATE: MAR. 26, 2015

SCALE: NOTED

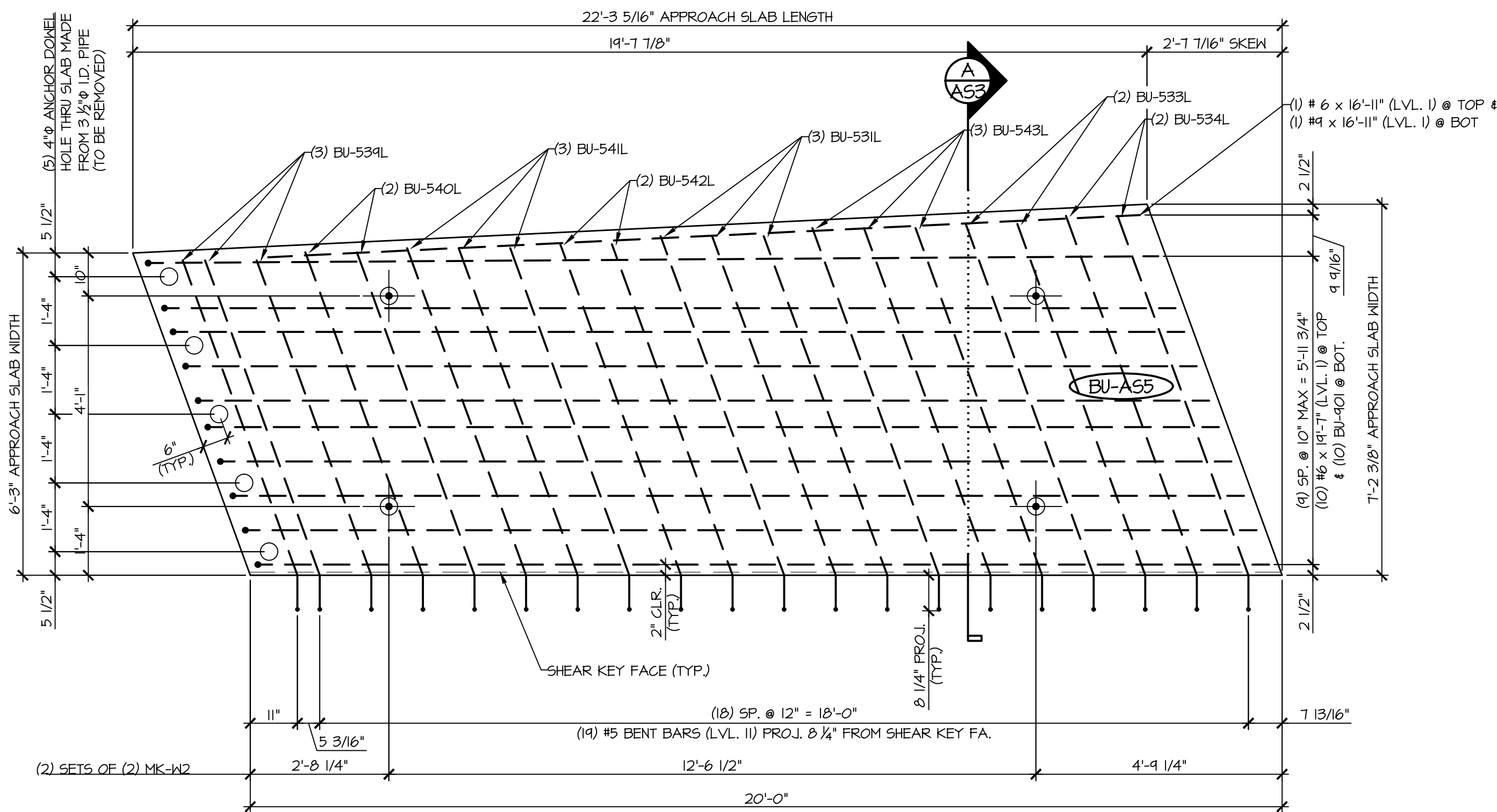
TOWN OF BURKE
VERMONT ROUTE 114
BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)

CHKD: DFTM: JDK

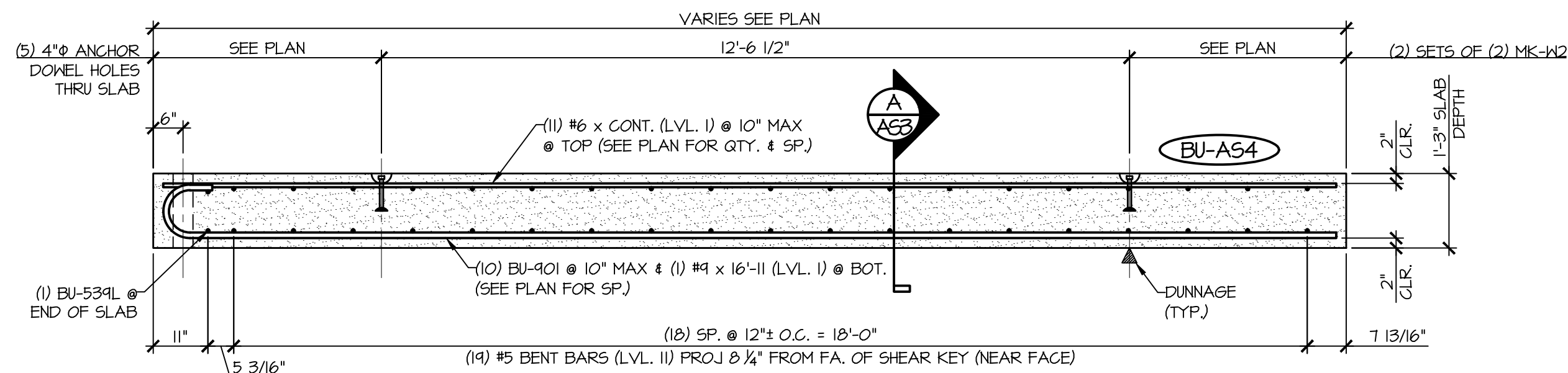
JOB NO: 23454-015

PRECAST APPROACH SLAB DETAILS

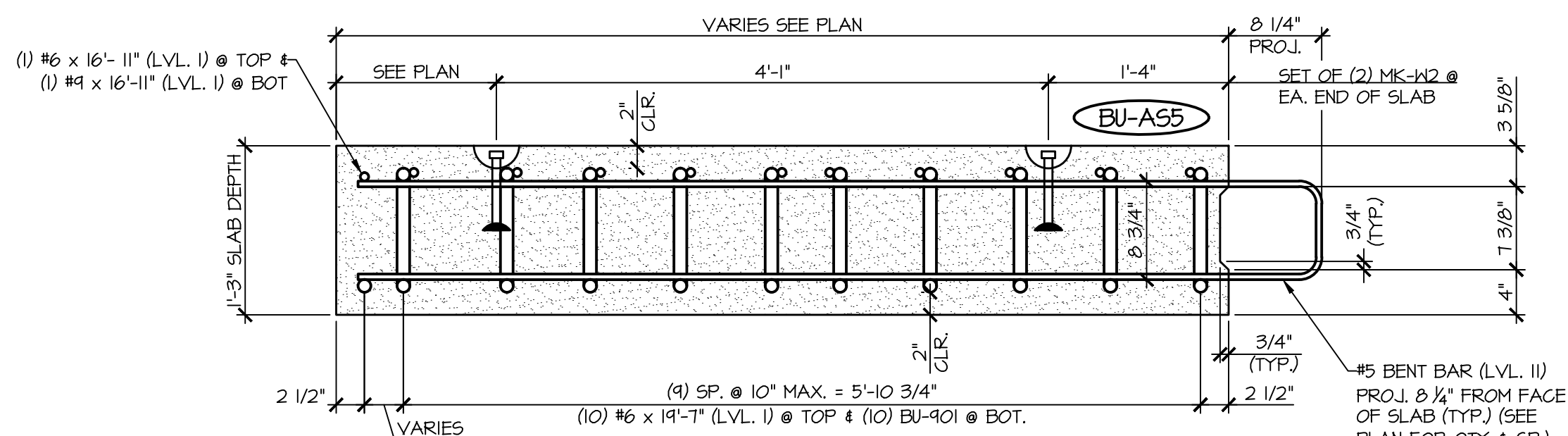
DWG. NO: A52



1
A53 PLAN VIEW IN FORM
1/2" = 1'-0"

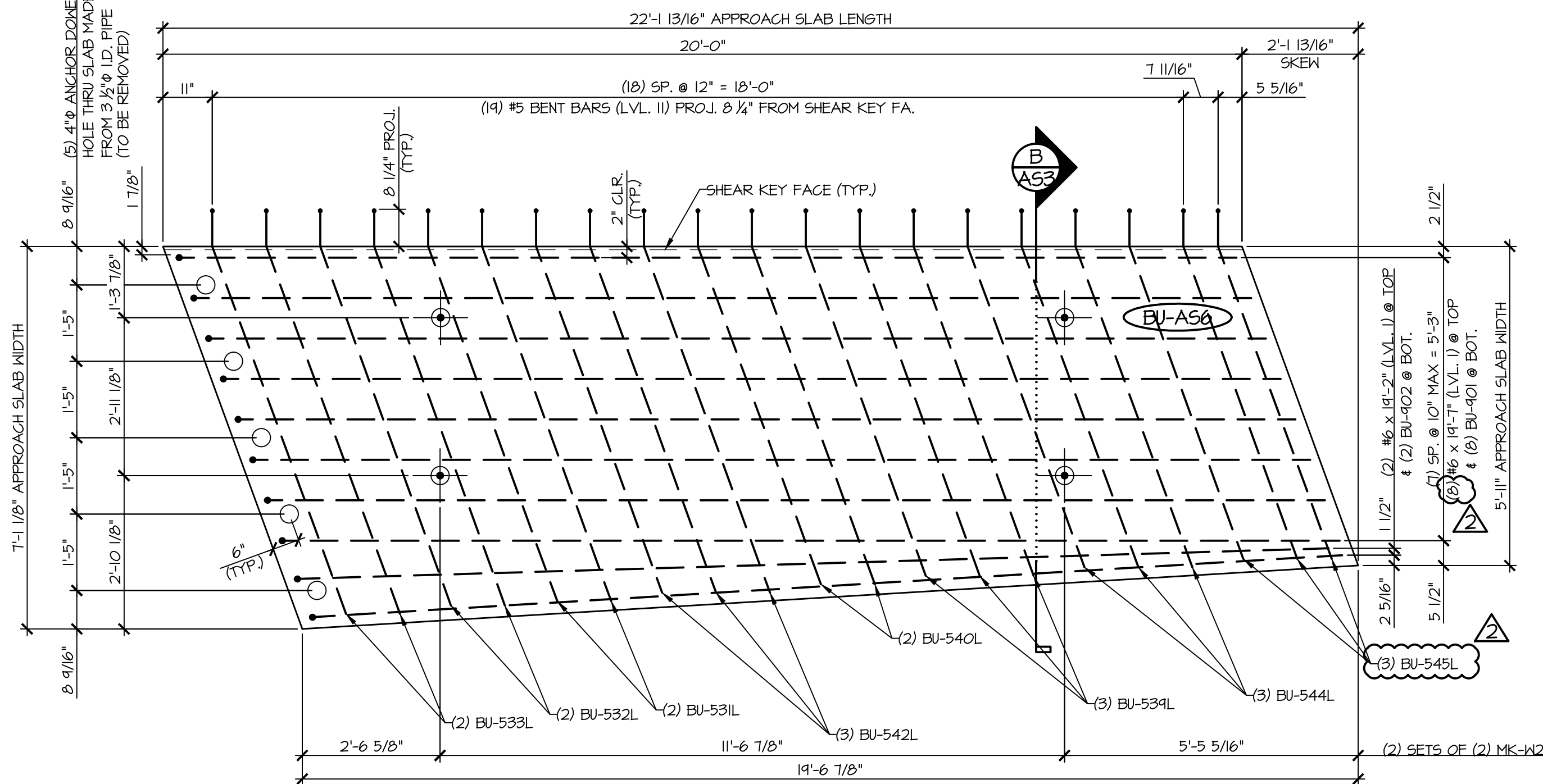


2
A53 LONGITUDINAL SECTION
1/2" = 1'-0"

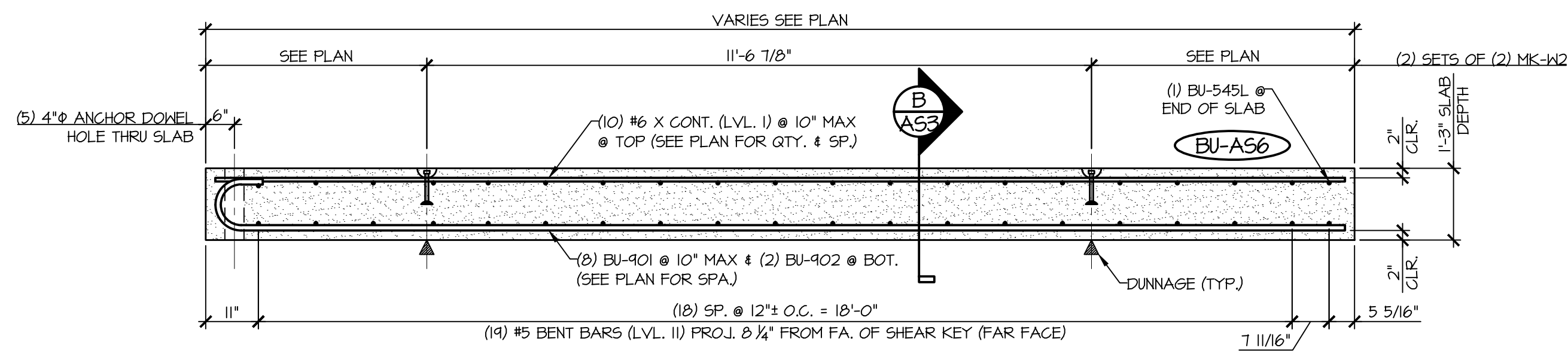


A
A53 APPROACH SLAB SECTION
1" = 1'-0"

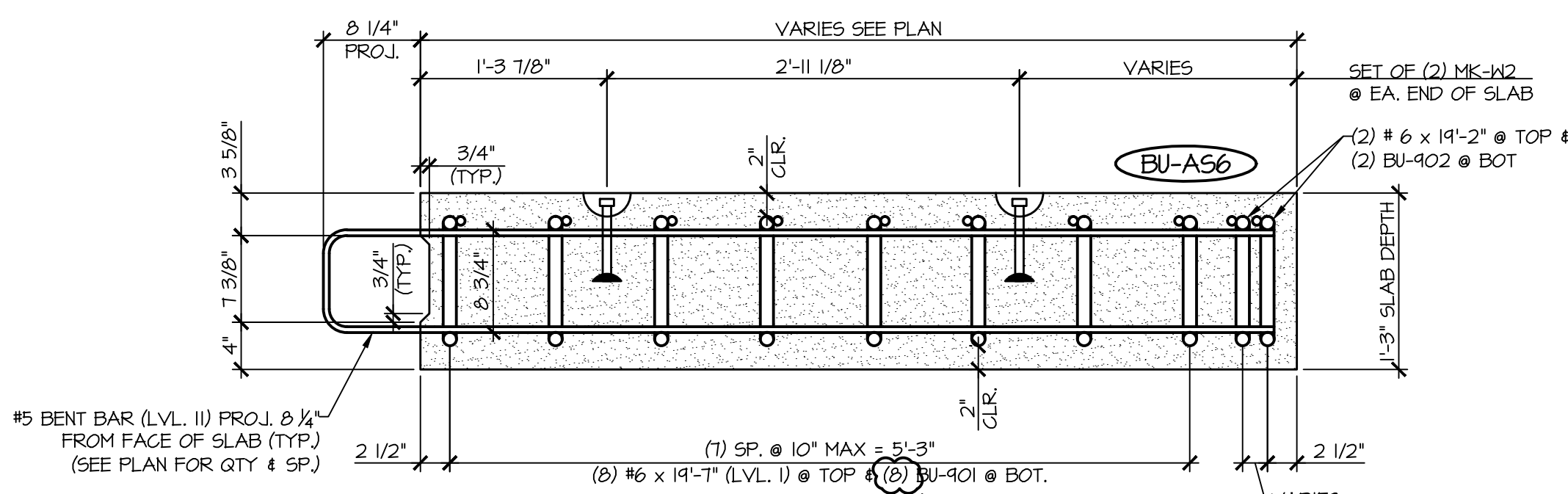
MARK: BU-A55	QTY.: 1	WT: 12.56T	VOL: 6.20 CY
MATERIAL LIST / APPROACH SLAB			
ITEM	MARK	DESCRIPTION	QTY.
1	BU-531L	#5 BENT BAR (LEVEL II, DUAL COATED)	3
2	BU-533L	#5 BENT BAR (LEVEL II, DUAL COATED)	2
3	BU-534L	#5 BENT BAR (LEVEL II, DUAL COATED)	2
4	BU-534L	#5 BENT BAR (LEVEL II, DUAL COATED)	3
5	BU-540L	#5 BENT BAR (LEVEL II, DUAL COATED)	2
6	BU-541L	#5 BENT BAR (LEVEL II, DUAL COATED)	3
7	BU-542L	#5 BENT BAR (LEVEL II, DUAL COATED)	2
8	BU-543L	#5 BENT BAR (LEVEL II, DUAL COATED)	3
9		#6 x 16'-11" (LEVEL I)	1
10		#6 x 14'-7" (LEVEL I)	10
11	BU-901	#9 BENT BAR (LEVEL I)	10
12		#9 x 16'-11" (LEVEL I)	1
13	MK-K2	4T x 7 1/8" SWIFT LIFT LIFTER	4



3
A53 PLAN VIEW IN FORM
1/2" = 1'-0"



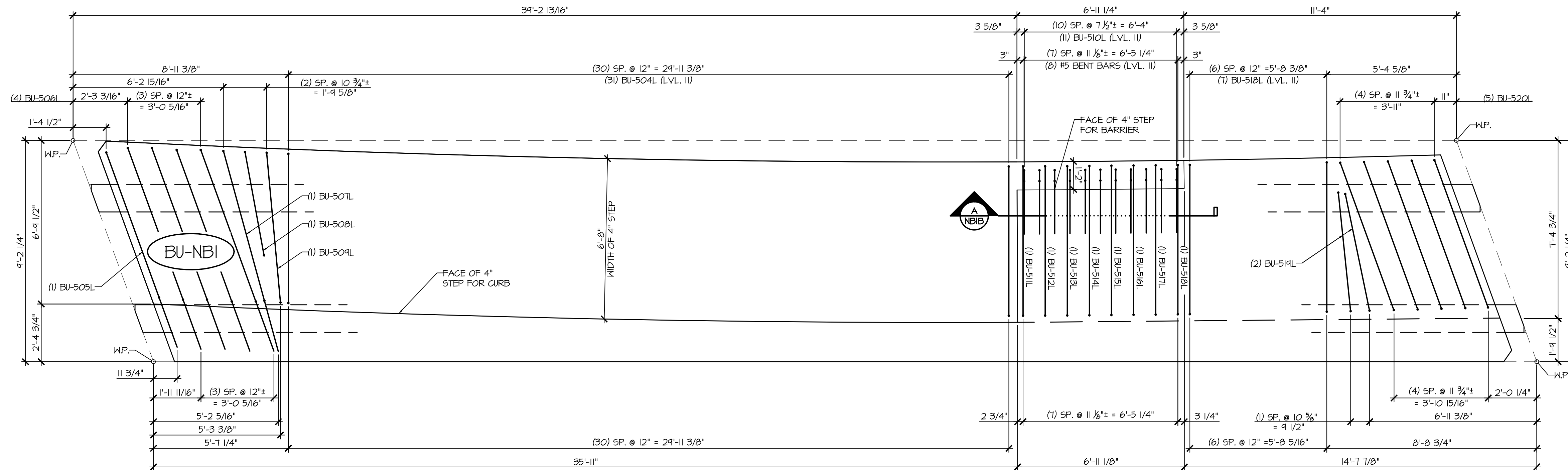
4
A53 LONGITUDINAL SECTION
1/2" = 1'-0"



B
A53 APPROACH SLAB SECTION
1" = 1'-0"

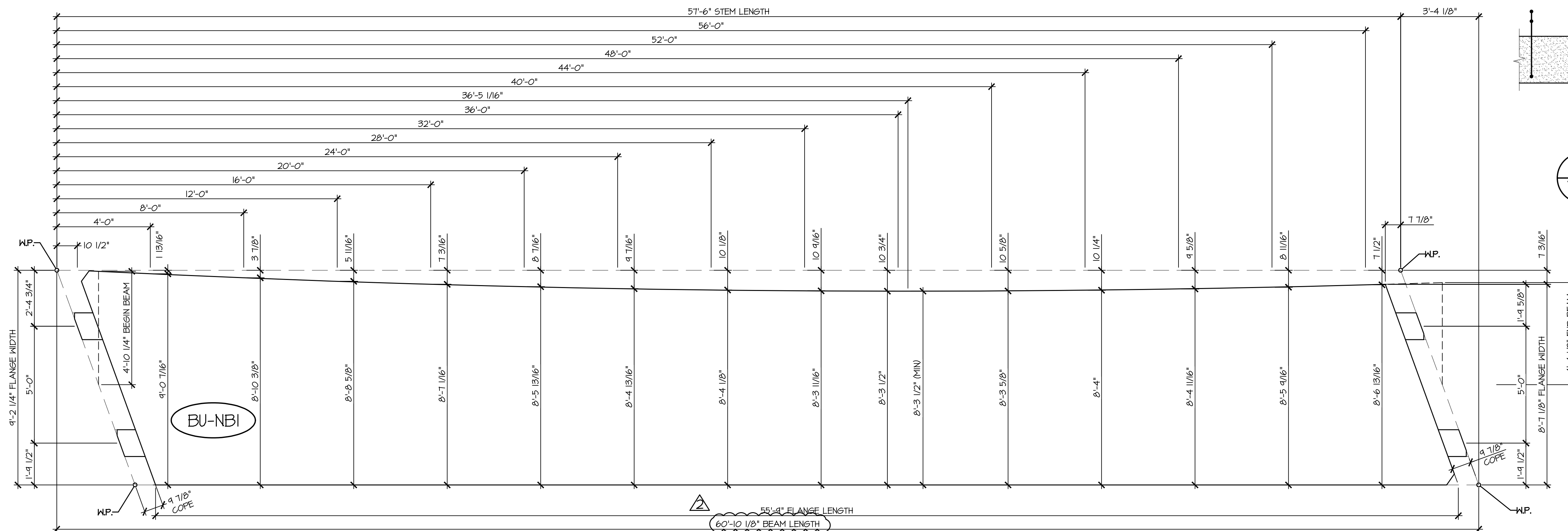
MARK: BU-A56	QTY.: 1	WT: 12.15T	VOL: 6.00 CY
MATERIAL LIST / APPROACH SLAB			
ITEM	MARK	DESCRIPTION	QTY.
1	BU-531L	#5 BENT BAR (LEVEL II, DUAL COATED)	2
2	BU-532L	#5 BENT BAR (LEVEL II, DUAL COATED)	2
3	BU-533L	#5 BENT BAR (LEVEL II, DUAL COATED)	2
4	BU-534L	#5 BENT BAR (LEVEL II, DUAL COATED)	3
5	BU-540L	#5 BENT BAR (LEVEL II, DUAL COATED)	2
6	BU-542L	#5 BENT BAR (LEVEL II, DUAL COATED)	3
7	BU-544L	#5 BENT BAR (LEVEL II, DUAL COATED)	3
8	BU-545L	#5 BENT BAR (LEVEL II, DUAL COATED)	3
9		#6 x 14'-2" (LEVEL I)	2
10		#6 x 14'-7" (LEVEL I)	8
11	BU-901	#9 BENT BAR (LEVEL I)	8
12	BU-902	#9 BENT BAR (LEVEL I)	2
14	MK-K2	4T x 7 1/8" SWIFT LIFT LIFTER	4

APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE STR., MOOREBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		CHKD:	DFTM: JDK
			JOB NO: 23454-015	
	PRECAST APPROACH SLAB DETAILS		DWG. NO: A53	

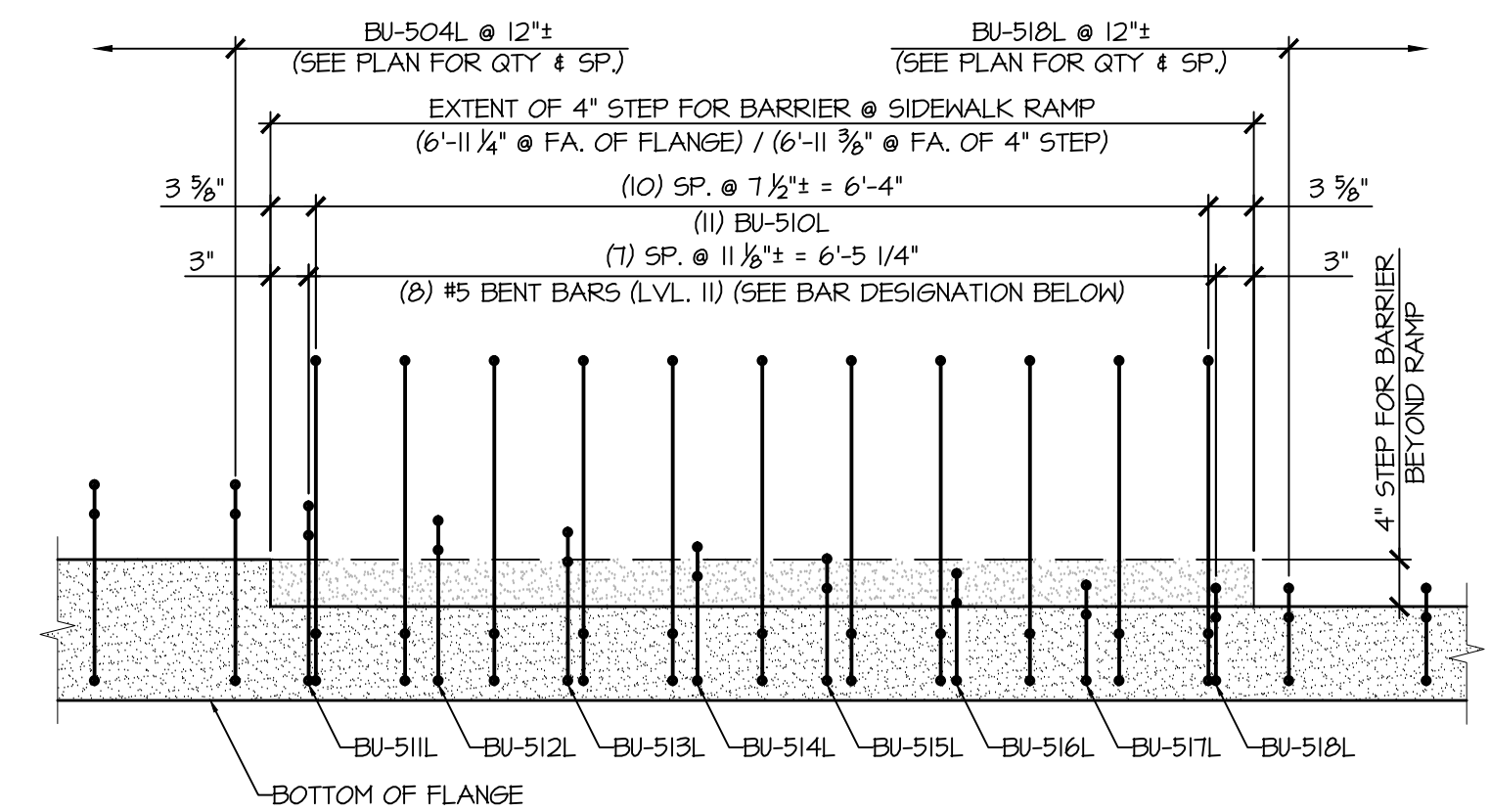


1
NBIB SIDEWALK REINFORCING PLAN VIEW IN FORM
3/8\" = 1'-0"

- SEE SHEET NBIC FOR STEM REINFORCING AT BEAM ENDS
- SEE SHEET NBID FOR FLANGE REINFORCING AT BEAM END

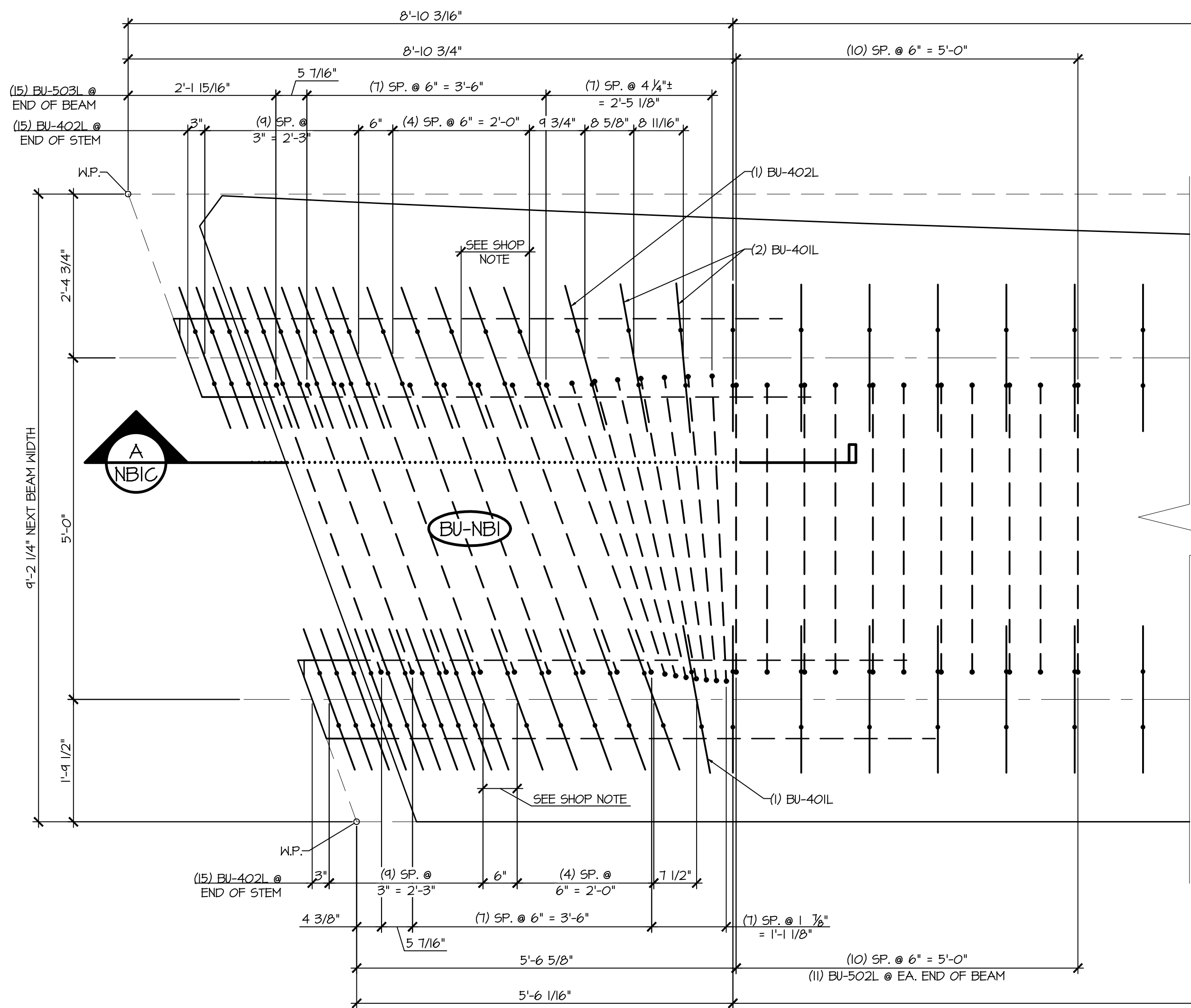


2
NBIB CURVED FLANGE LAYOUT
3/8\" = 1'-0"



A
NBIB SIDEWALK TRANSITION REINFORCING SECTION
3/4\" = 1'-0"

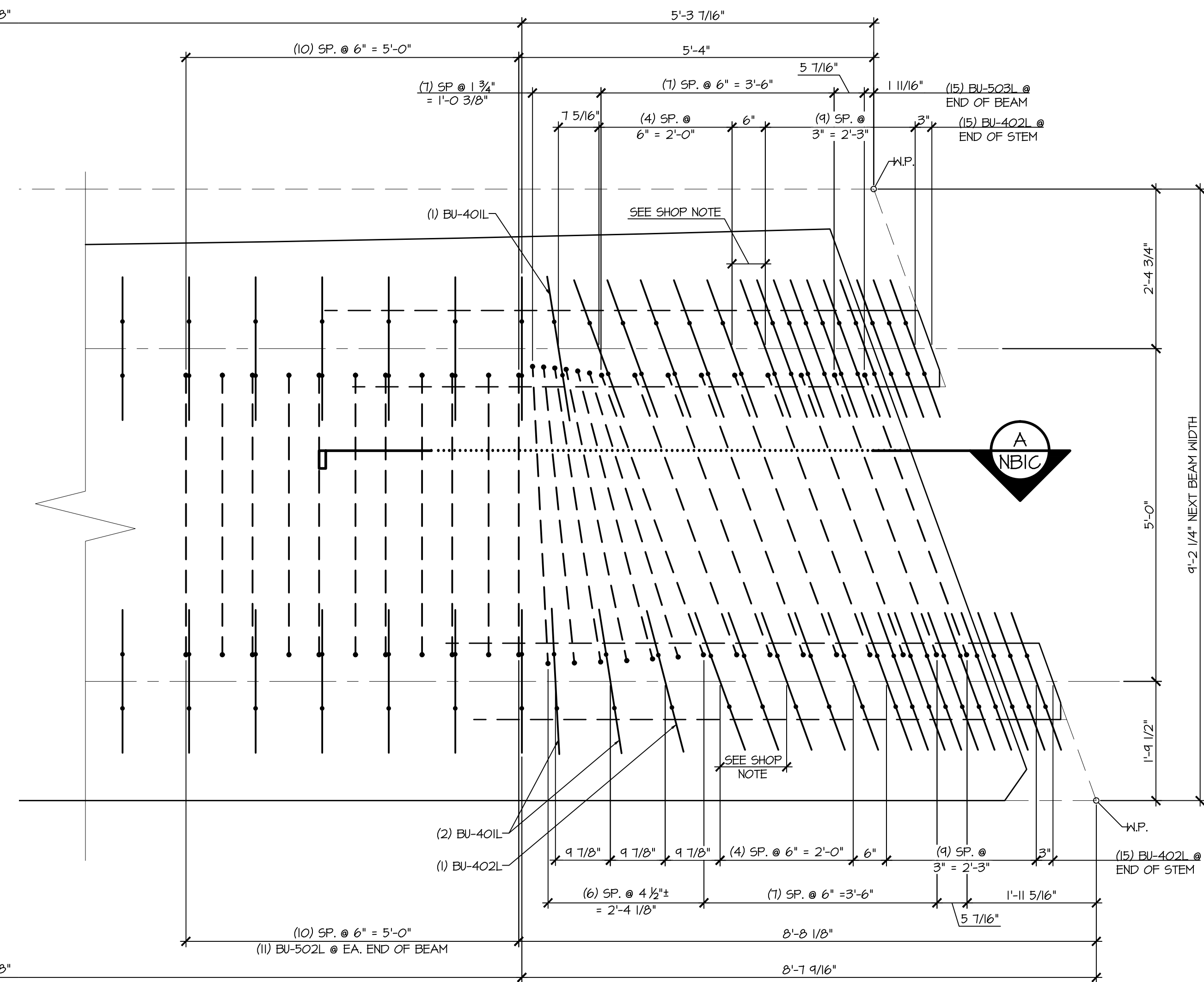
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 OAK STR., WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		CHKD:	DFTM: JDK
			JOB NO:	23454-015
	PRESTRESSED NEXT BEAM DETAILS		DWG. NO: NB1B	



1 STEM REINFORCING PLAN VIEW IN FORM
NBIC

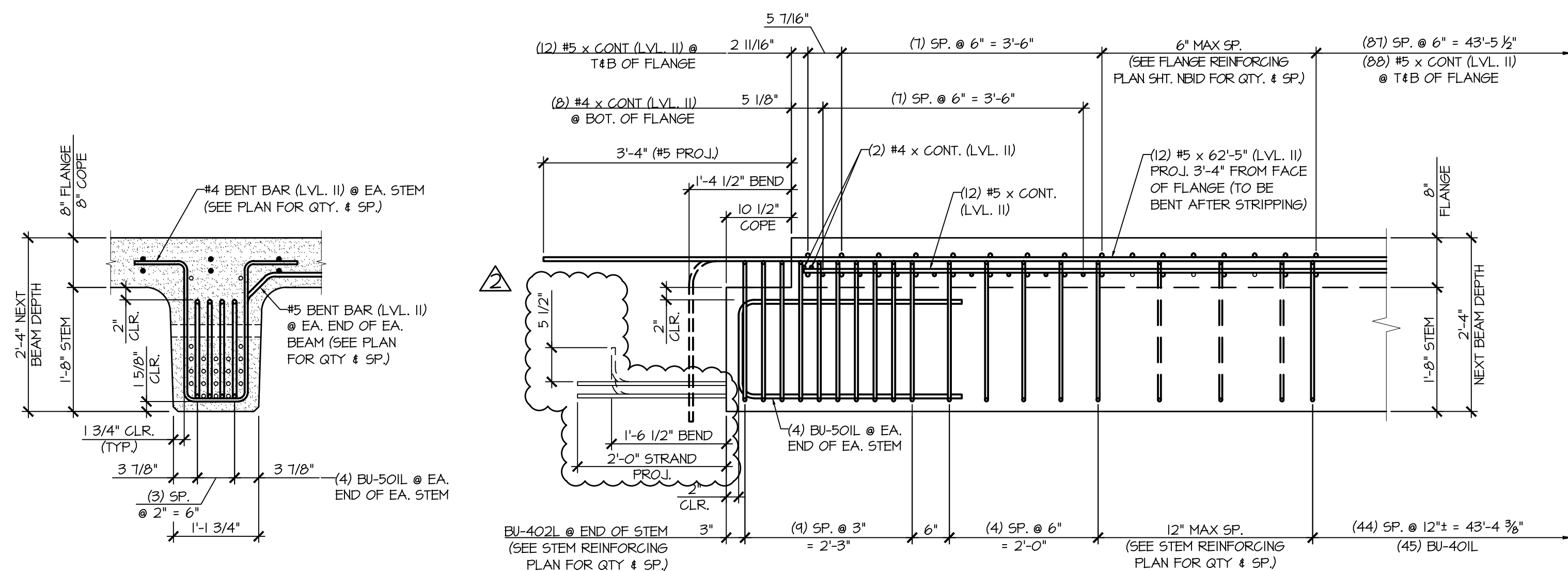
- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NBID FOR REINFORCING PLAN
- SEE SHEET NBID FOR SIDEWALK REINFORCING PLAN
- SEE SHEET NBID FOR FLANGE REINFORCING AT BEAM END

SHOP NOTE
- STIRRUP SPACING TO BE ADJUSTED
TO ALLOW FOR 2" PVC SLEEVE



2 STEM REINFORCING PLAN VIEW IN FORM
NBIC

- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NBID FOR REINFORCING PLAN
- SEE SHEET NBID FOR SIDEWALK REINFORCING PLAN
- SEE SHEET NBID FOR FLANGE REINFORCING AT BEAM END

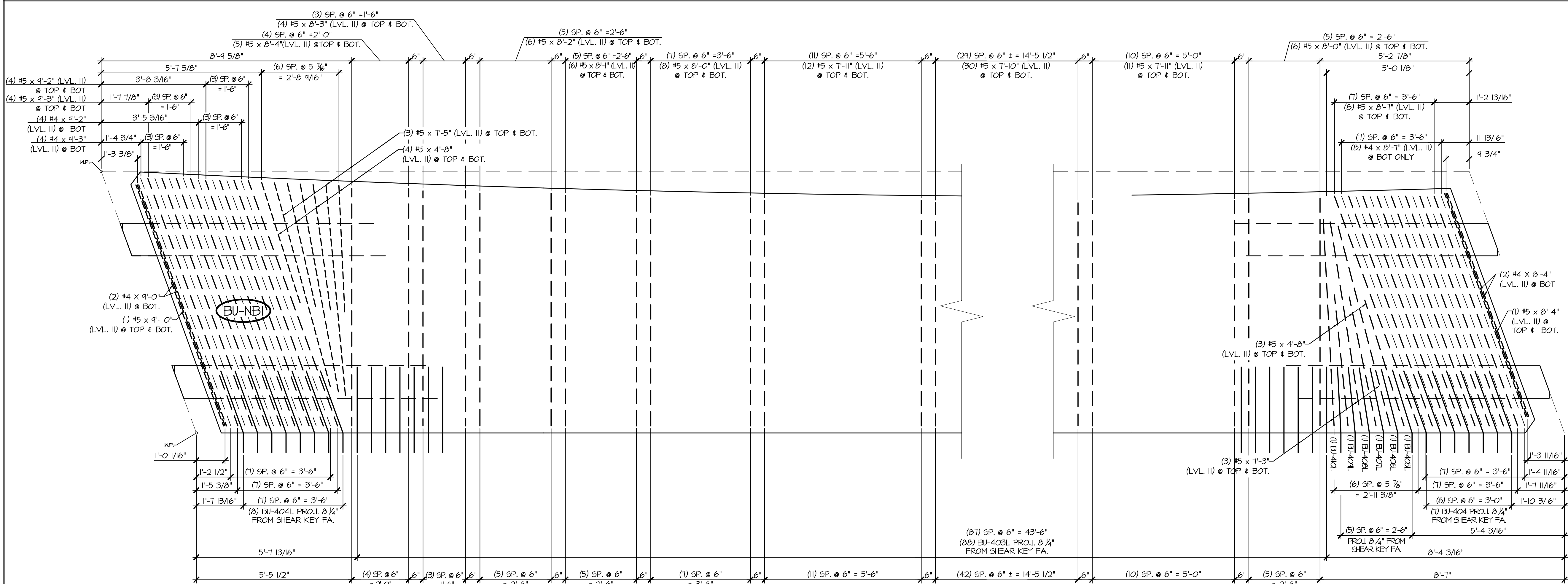


STEM SECTION

STEM ELEVATION

A END BLOCK STEM REINFORCING DETAILS
NBIC

APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 ONE STR., MIDDLEBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		SCALE: NOTED	
	PRESTRESSED NEXT BEAM DETAILS		CHKD: DFTM: JDK JOB NO: 23454-015 DWG. NO: NBIC	

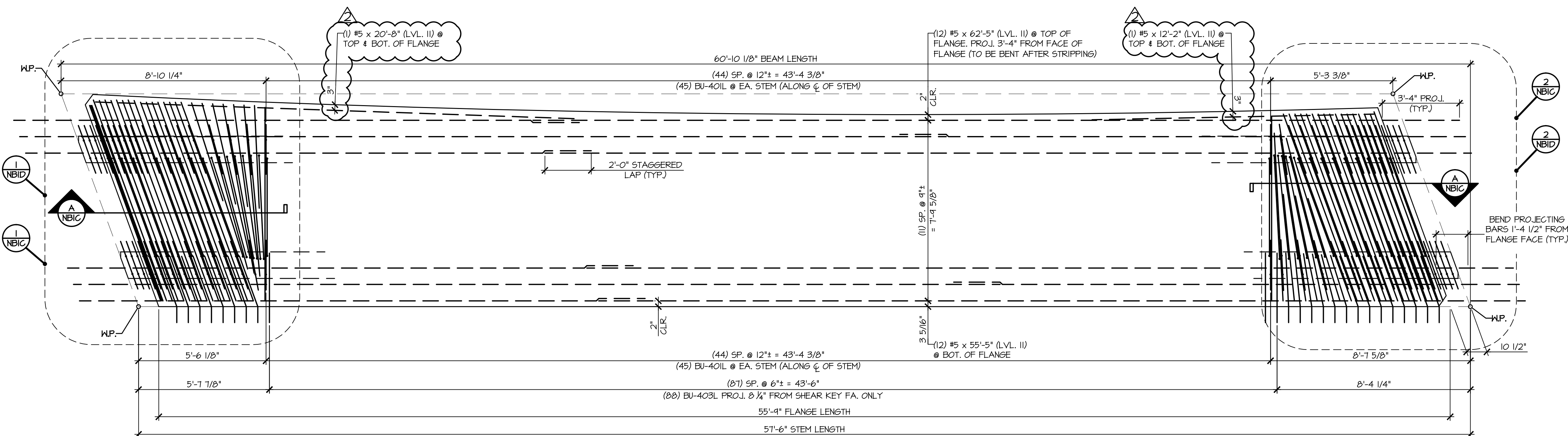


1 NBID FLANGE REINFORCING PLAN VIEW IN FORM
1/2" = 1'-0"

- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NBIB FOR SIDEWALK REINFORCING PLAN
- SEE SHEET NBID FOR STEM REINFORCING AT BEAM END

2 NBID FLANGE REINFORCING PLAN VIEW IN FORM
1/2" = 1'-0"

- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NBIB FOR SIDEWALK REINFORCING PLAN
- SEE SHEET NBID FOR STEM REINFORCING AT BEAM END



3 NBID REINFORCING PLAN VIEW IN FORM
3/8" = 1'-0"

- SEE DETAIL "NBIB" FOR SIDEWALK, DRIVEWAY & RAILING LAYOUT & REINFORCEMENT DETAILS
- SEE SHT. "NBIC" FOR STEM REINFORCEMENT DETAILS
- SEE SHT. "NBID" FOR FLANGE REINFORCEMENT DETAILS

MARK: BU-NBI		QTY.: 1	WT: 47.52T	VOL: 23.47CY
MATERIAL LIST / ABUTMENT				
ITEM	MARK	DESCRIPTION		QTY.
1	BU-401L	#4 BENT BAR (LEVEL II, DUAL COATED)		96
2	BU-402L	#4 BENT BAR (LEVEL II, DUAL COATED)		62
3	BU-403L	#4 BENT BAR (LEVEL II, DUAL COATED)		88
4	BU-404L	#4 BENT BAR (LEVEL II, DUAL COATED)		15
5	BU-405L	#4 BENT BAR (LEVEL II, DUAL COATED)		1
6	BU-406L	#4 BENT BAR (LEVEL II, DUAL COATED)		1
7	BU-407L	#4 BENT BAR (LEVEL II, DUAL COATED)		1
8	BU-408L	#4 BENT BAR (LEVEL II, DUAL COATED)		1
9	BU-409L	#4 BENT BAR (LEVEL II, DUAL COATED)		1
10	BU-410L	#4 BENT BAR (LEVEL II, DUAL COATED)		1
11		#4 x 8'-4" (LEVEL II, DUAL COATED)		2
12		#4 x 8'-7" (LEVEL II, DUAL COATED)		8
13		#4 x 9'-0" (LEVEL II, DUAL COATED)		2
14		#4 x 9'-2" (LEVEL II, DUAL COATED)		4
15		#4 x 9'-3" (LEVEL II, DUAL COATED)		4
16	BU-501L	#5 BENT BAR (LEVEL II, DUAL COATED)		16
17	BU-502L	#5 BENT BAR (LEVEL II, DUAL COATED)		22
18	B-503L	#5 BENT BAR (LEVEL II, DUAL COATED)		30
19	BU-504L	#5 BENT BAR (LEVEL II, DUAL COATED)		31
20	BU-505L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
21	BU-506L	#5 BENT BAR (LEVEL II, DUAL COATED)		4
22	BU-507L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
23	BU-508L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
24	BU-509L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
25	BU-510L	#5 BENT BAR (LEVEL II, DUAL COATED)		11
26	BU-511L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
27	BU-512L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
28	BU-513L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
29	BU-514L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
30	BU-515L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
31	BU-516L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
32	BU-517L	#5 BENT BAR (LEVEL II, DUAL COATED)		1
33	BU-518L	#5 BENT BAR (LEVEL II, DUAL COATED)		8
34	BU-519L	#5 BENT BAR (LEVEL II, DUAL COATED)		2
35	BU-520L	#5 BENT BAR (LEVEL II, DUAL COATED)		5
36		#5 x 4'-8" (LEVEL II, DUAL COATED)		14
37		#5 x 7'-3" (LEVEL II, DUAL COATED)		6
38		#5 x 7'-5" (LEVEL II, DUAL COATED)		6
39		#5 x 7'-10" (LEVEL II, DUAL COATED)		60
40		#5 x 7'-11" (LEVEL II, DUAL COATED)		46
41		#5 x 8'-0" (LEVEL II, DUAL COATED)		28
42		#5 x 8'-1" (LEVEL II, DUAL COATED)		12
43		#5 x 8'-2" (LEVEL II, DUAL COATED)		12
44		#5 x 8'-3" (LEVEL II, DUAL COATED)		8
45		#5 x 8'-4" (LEVEL II, DUAL COATED)		12
46		#5 x 8'-7" (LEVEL II, DUAL COATED)		16
47		#5 x 9'-0" (LEVEL II, DUAL COATED)		2
48		#5 x 9'-2" (LEVEL II, DUAL COATED)		8
49		#5 x 9'-3" (LEVEL II, DUAL COATED)		8
50		#5 x 12'-2" (LEVEL II, DUAL COATED)		2
51		#5 x 20'-8" (LEVEL II, DUAL COATED)		2
52		#5 x 55'-5" (40'-0" + 17'-5" W/ (1) 2'-0" STAGGERED LAP) (LEVEL II, DUAL COATED)		12
53		#5 x 62'-5" (40'-0" + 24'-5" W/ (1) 2'-0" STAGGERED LAP) (LEVEL II, DUAL COATED)		12
54		SET OF (4) 0.50"Ø x 270 KSI STRAND LIFTING LOOPS		4
55		DAYTON B-16 COIL LOOP INSERTS, 3/4" COIL, SNL 3000		28

APPROVAL STAMP:

J.P. CARRARA & SONS INC.

Precast & Prestress Manufacturer
2464 ONE STR., MIDDLEBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010

T. BUCK CONSTRUCTION, INC.

CONTRACTOR
AUBURN, MAINE

STATE OF VERMONT AGENCY OF TRANSPORTATION
COUNTY OF CALEDONIA

DATE: MAR. 26, 2015

SCALE: NOTED

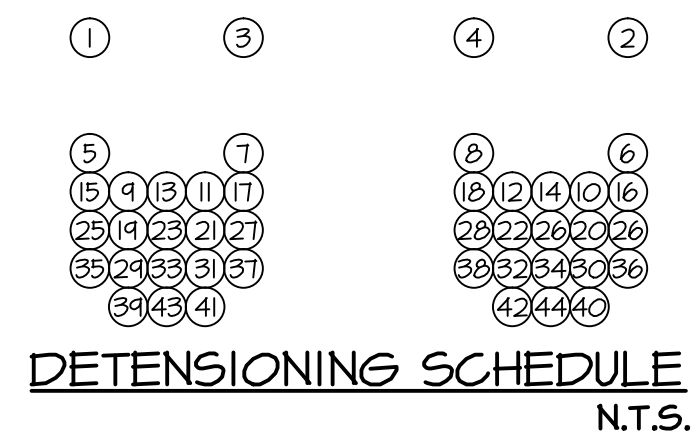
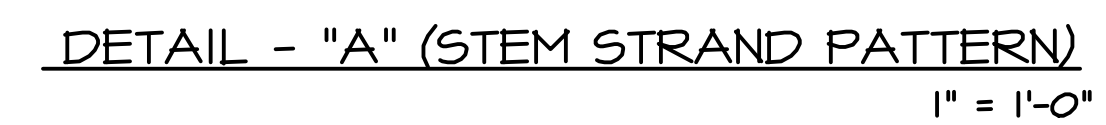
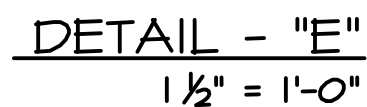
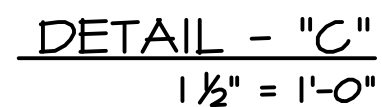
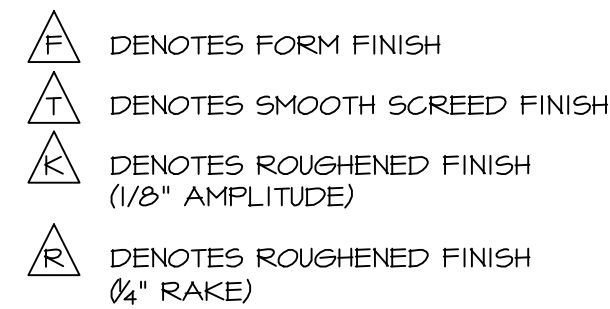
TOWN OF BURKE
VERMONT ROUTE 114
BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)

CHKD: DFTM: JDC

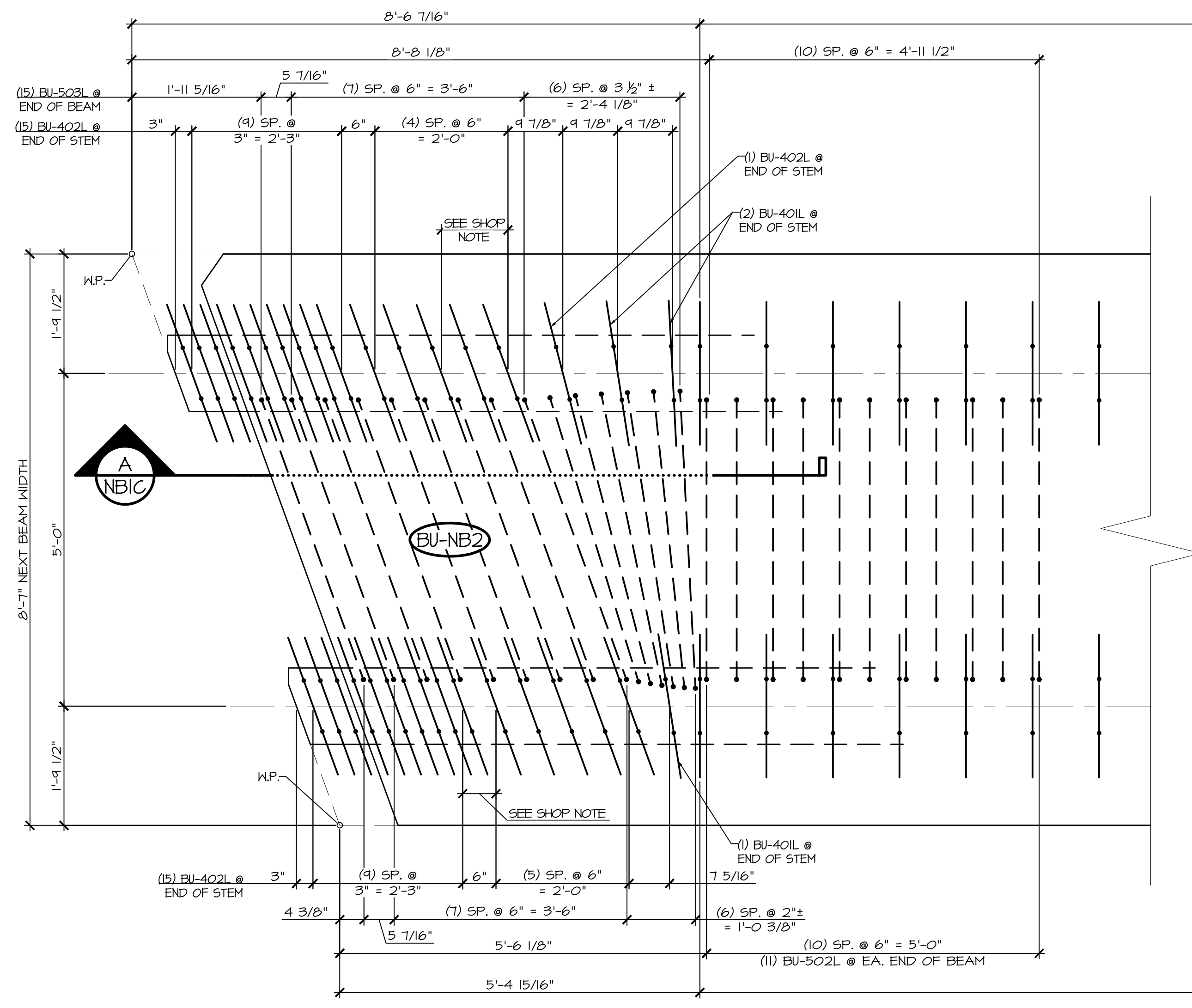
JOB NO: 23454-015

PRESTRESSED NEXT BEAM DETAILS

DWG. NO: NBID



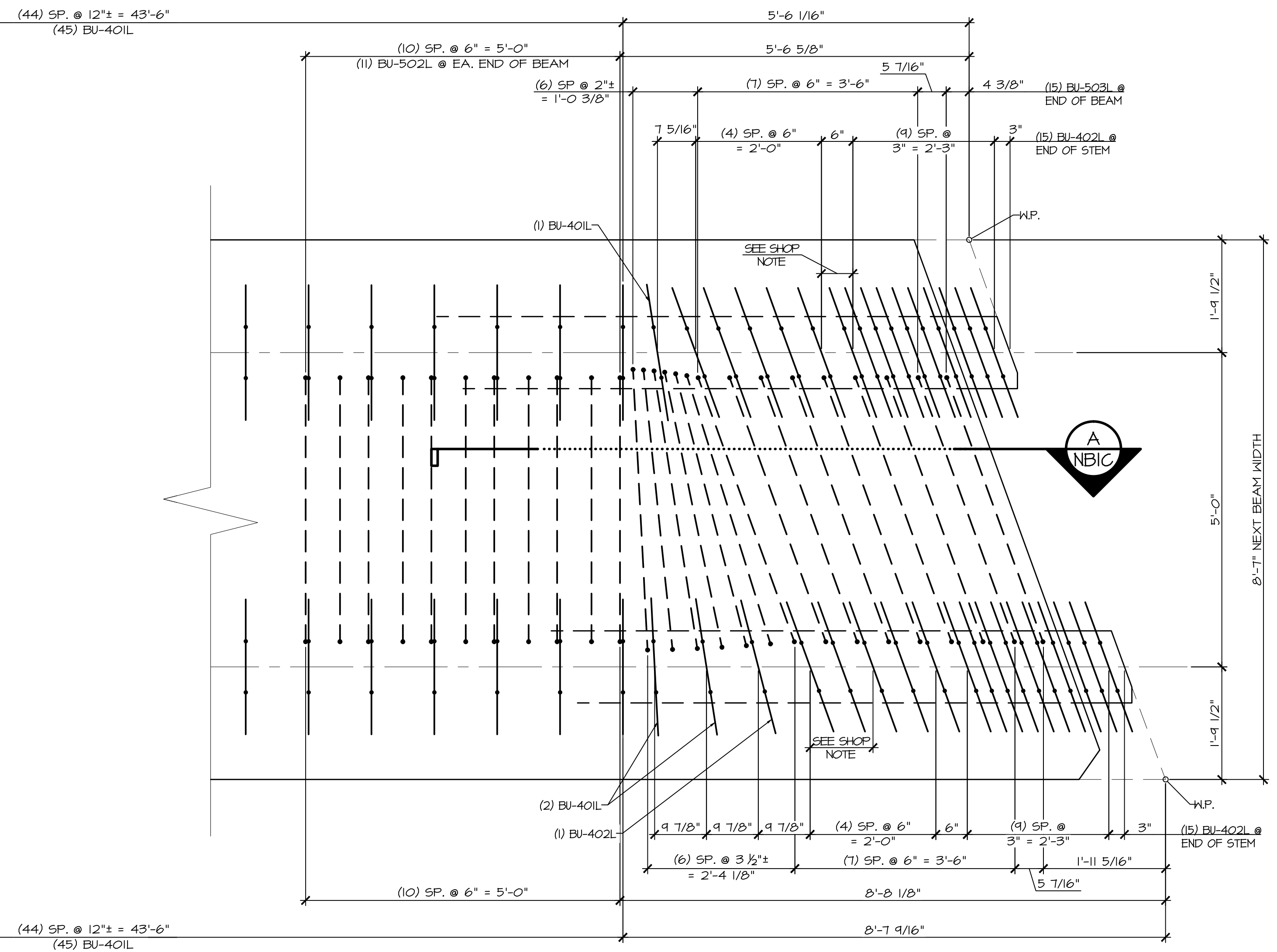
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE STR., WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		CHKD:	DFTM: JDK
			JOB NO: 23454-015	
	PRESTRESSED NEXT BEAM DETAILS		DWG. NO: NB2A	



1
NB2B STEM REINFORCING PLAN VIEW IN FORM
3/4" = 1'-0"

- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NB2C FOR REINFORCING PLAN
- SEE SHEET NB2C FOR FLANGE REINFORCING AT BEAM END

SHOP NOTE
- STIRRUP SPACING TO BE
ADJUSTED TO ALLOW FOR 2"
PVC SLEEVE

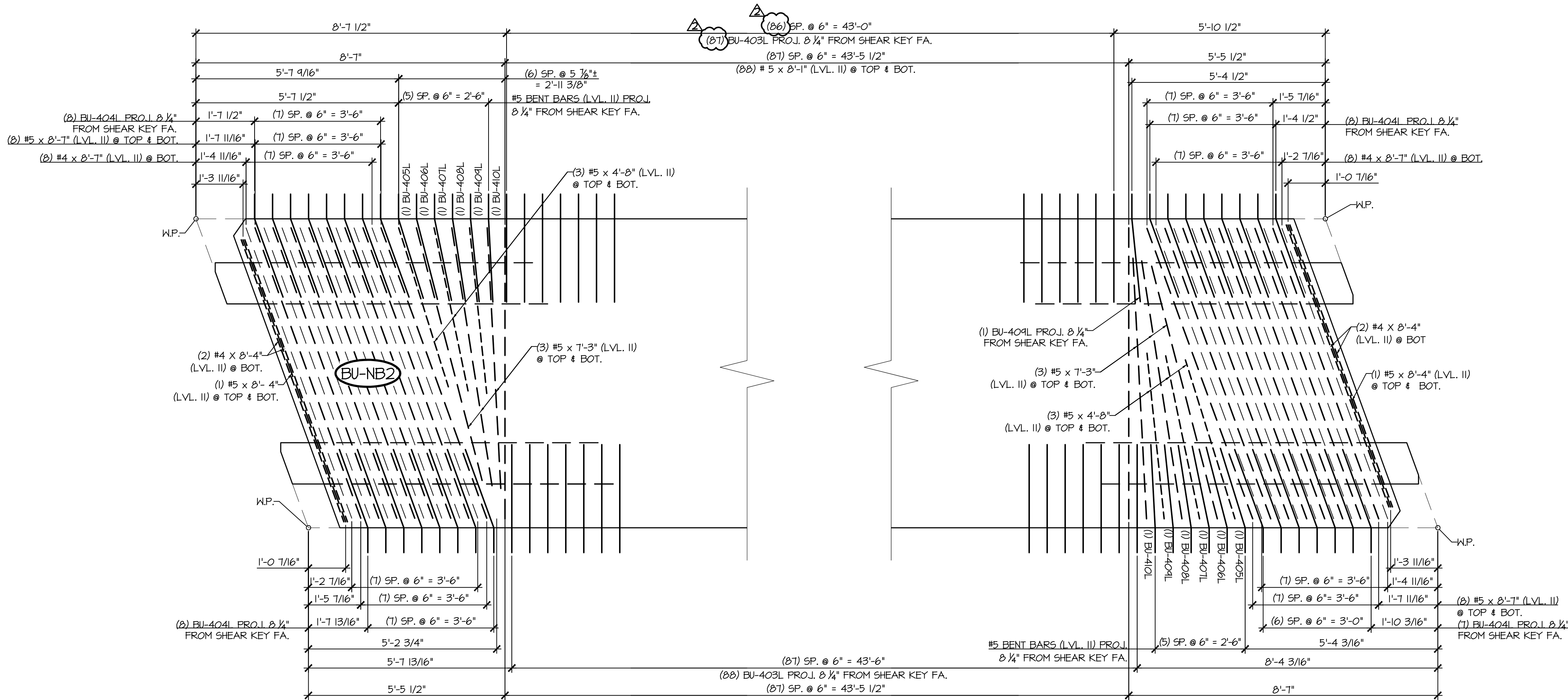


2
NB2B STEM REINFORCING PLAN VIEW IN FORM
3/4" = 1'-0"

- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NB2C FOR REINFORCING PLAN
- SEE SHEET NB2C FOR FLANGE REINFORCING AT BEAM END

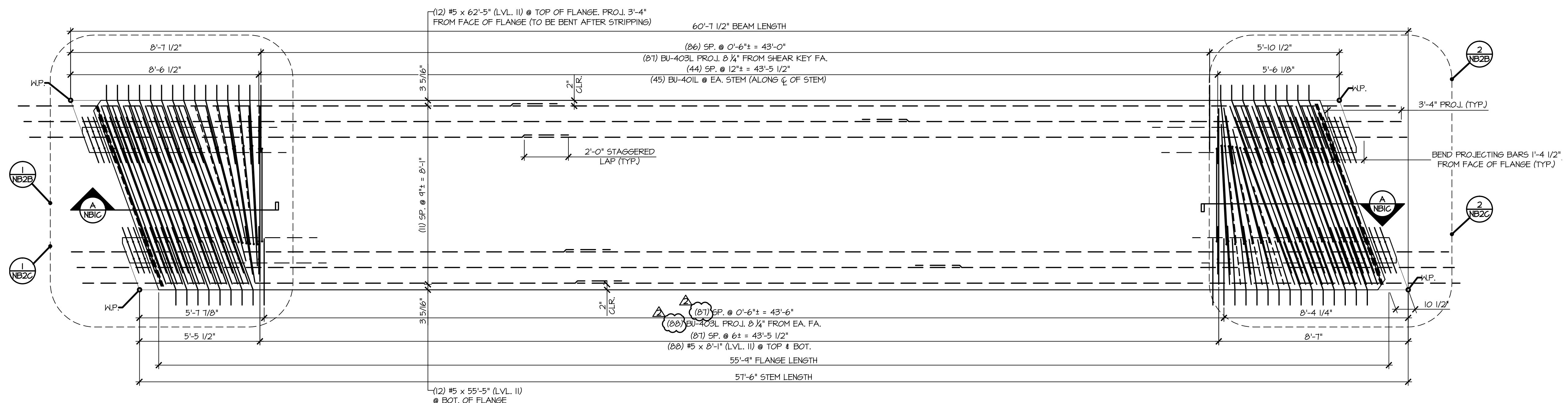
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE ST., MOORESBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		CHKD:	DFTM: JDK
			JOB NO:	23454-015
	PRESTRESSED NEXT BEAM DETAILS		DWG. NO: NB2B	

MARK: BU-NB2	QTY.: 2	WT: 41.34 T	VOL: 20.42 CY
MATERIAL LIST / NEXT BEAM			
ITEM	MARK	DESCRIPTION	QTY.
1	BU-401L	#4 BENT BAR (LEVEL II, DUAL COATED)	96
2	BU-402L	#4 BENT BAR (LEVEL II, DUAL COATED)	62
3	BU-403L	#4 BENT BAR (LEVEL II, DUAL COATED)	175
4	BU-404L	#4 BENT BAR (LEVEL II, DUAL COATED)	31
5	BU-405L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
6	BU-406L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
7	BU-407L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
8	BU-408L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
9	BU-409L	#4 BENT BAR (LEVEL II, DUAL COATED)	3
10	BU-410L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
11		#4 x 8'-4" (LEVEL II, DUAL COATED)	4
12		#4 x 8'-7" (LEVEL II, DUAL COATED)	16
13	BU-501L	#5 BENT BAR (LEVEL II, DUAL COATED)	16
14	BU-502L	#5 BENT BAR (LEVEL II, DUAL COATED)	22
15	BU-503L	#5 BENT BAR (LEVEL II, DUAL COATED)	30
16		#5 x 4'-8" (LEVEL II, DUAL COATED)	12
17		#5 x 7'-3" (LEVEL II, DUAL COATED)	12
18		#5 x 8'-1" (LEVEL II, DUAL COATED)	176
19		#5 x 8'-4" (LEVEL II, DUAL COATED)	4
20		#5 x 8'-7" (LEVEL II, DUAL COATED)	32
21		#5 x 55'-5" (40'-0" + 17'-5" W/ (1) 2'-0" STAGGERED LAP) (LEVEL II, DUAL COATED)	12
22		#5 x 62'-5" (40'-0" + 24'-5" W/ (1) 2'-0" STAGGERED LAP) (LEVEL II, DUAL COATED)	12
23		SET OF (4) 0.50"Ø x 270 KSI STRAND LIFTING LOOPS	4
24		DAYTON B-16 COIL LOOP INERTS, 3/4" COIL, SKL 3000	28



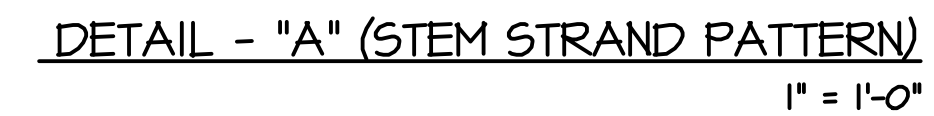
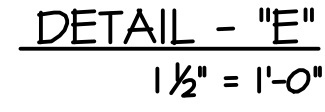
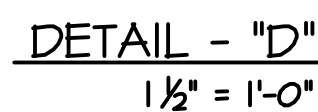
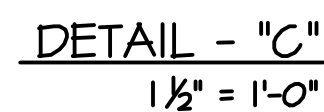
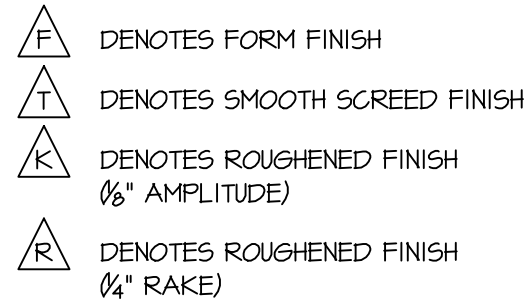
1
NB2C
FLANGE REINFORCING PLAN VIEW IN FORM
1/2" = 1'-0"
- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NB2B FOR STEM REINFORCING AT BEAM END

2
NB2C
FLANGE REINFORCING PLAN VIEW IN FORM
1/2" = 1'-0"
- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NB2B FOR STEM REINFORCING AT BEAM END



3
NB2C
REINFORCING PLAN VIEW IN FORM
3/8" = 1'-0"
- SEE SHT. NB2B FOR STEM REINFORCEMENT AT BEAM ENDS
- SEE '1/NB2C' FOR FLANGE REINFORCEMENT AT BEAM ENDS

APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE ST., MOORESBURY, VERMONT 05753 Phone: (802) 388-6361 Fax: (802) 388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		SCALE: NOTED	CHKD: DFTM: JDK
	PRESTRESSED NEXT BEAM DETAILS		JOB NO: 23454-015	DWG. NO: NB2C



① ③ ④ ②

⑤ ⑦

15 9 13 11 17

25 19 23 21 27

35 29 33 31 37

39 43 41

⑧ ⑥

18 12 14 10 16

28 22 26 20 26

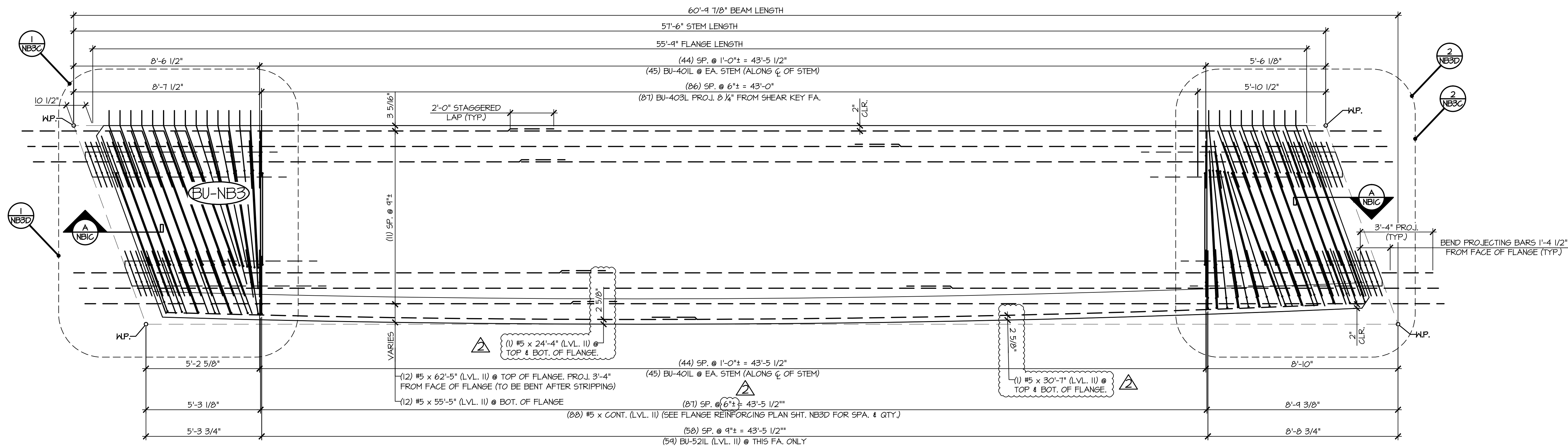
38 32 36 30 36

42 44 40

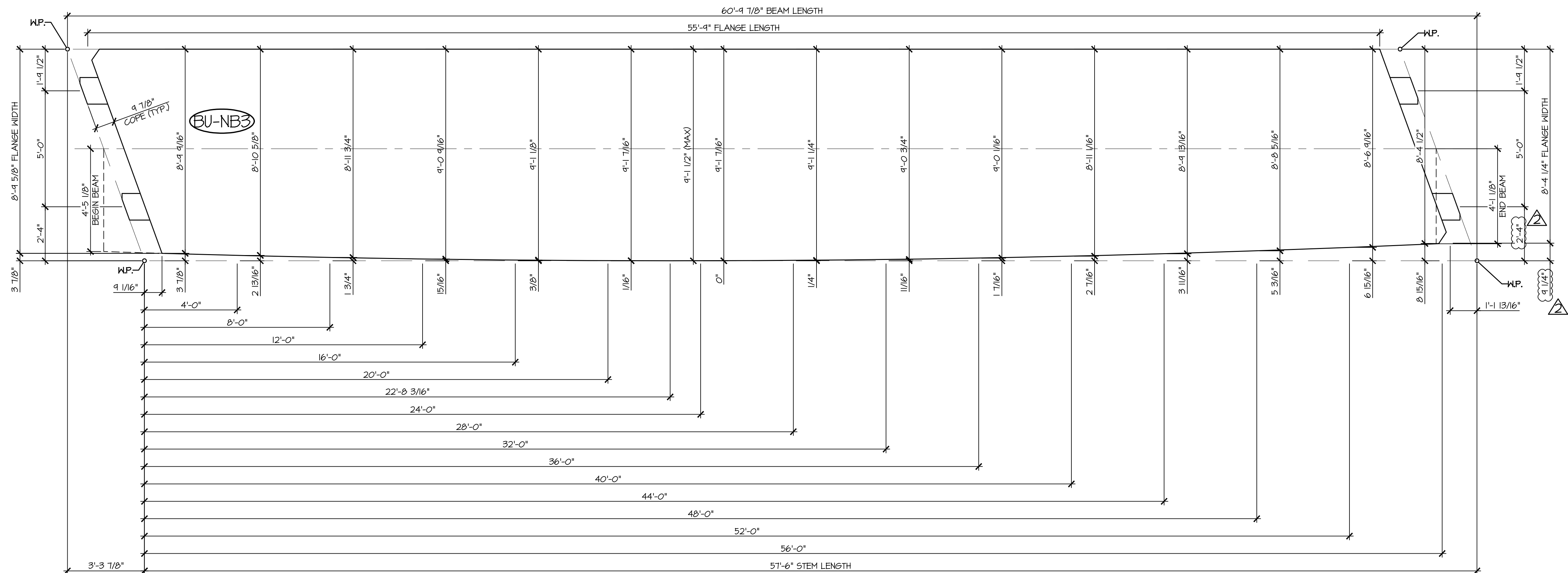
DETENSIONING SCHEDULE

N.T.S.

APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE STR., WOODBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		CHKD:	DFTM: JDK
			JOB NO: 23454-015	
	PRESTRESSED NEXT BEAM DETAILS		DWG. NO: NB3A	



REINFORCING PLAN VIEW IN FORM
 3/8" = 1'-0"
 - SEE SHEET 'NB3C' FOR STEM REINFORCING AT BEAM ENDS
 - SEE SHEET 'NB3D' FOR FLANGE & TEXAS RAIL REINFORCING AT BEAM END

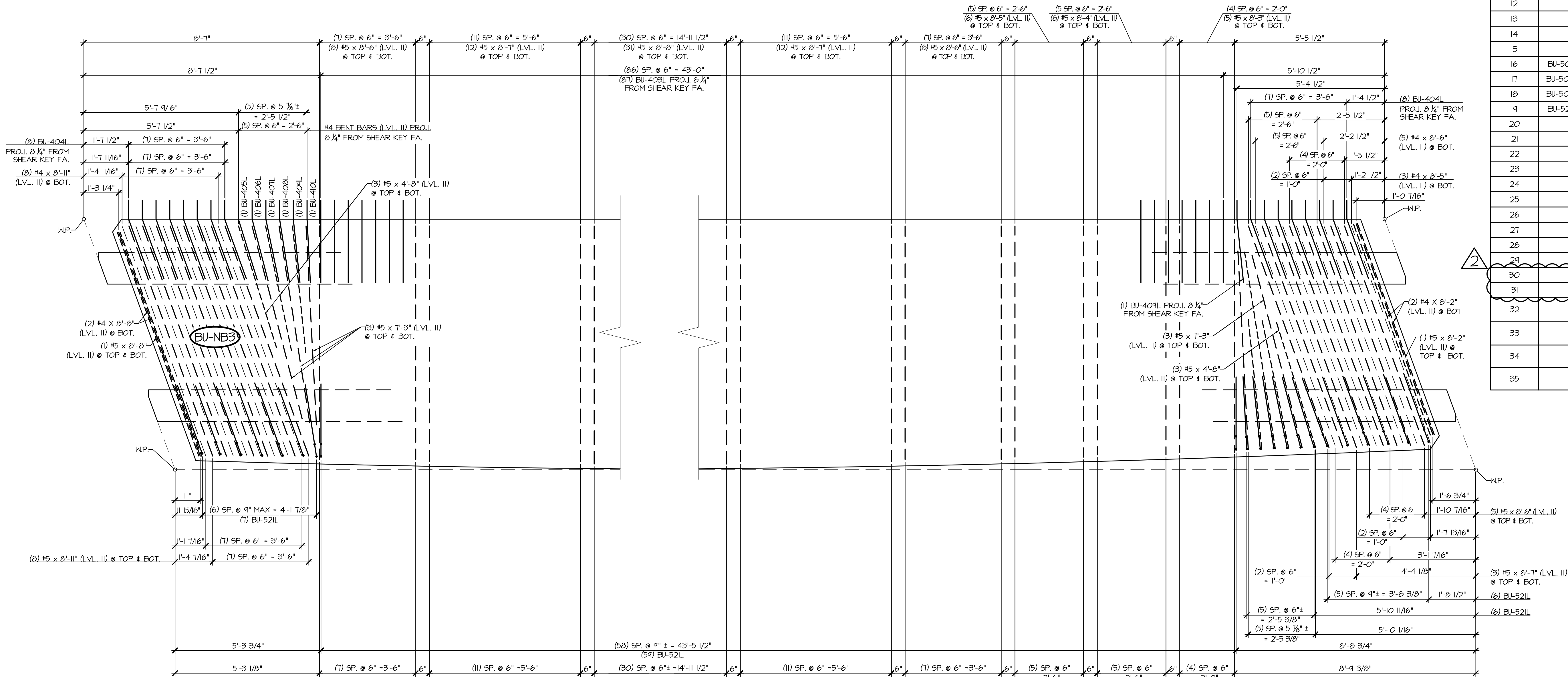


2 NB3B CURVED FLANGE LAYOUT
 3/8" = 1'-0"

APPROVAL STAMP:

J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer <small>2464 CASE STR., MOOREBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010</small>		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
		SCALE: NOTED	
TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		CHKD:	DFTM: JDC
		JOB NO:	23454-015
PRESTRESSED NEXT BEAM DETAILS		DWG. NO: NB3B	

MARK: BU-NB3	QTY.: 1	WT: 43.11T	VOL: 21.29 CY
MATERIAL LIST / NEXT BEAM			
ITEM	MARK	DESCRIPTION	QTY.
1	BU-401L	#4 BENT BAR (LEVEL II, DUAL COATED)	46
2	BU-402L	#4 BENT BAR (LEVEL II, DUAL COATED)	62
3	BU-403L	#4 BENT BAR (LEVEL II, DUAL COATED)	81
4	BU-404L	#4 BENT BAR (LEVEL II, DUAL COATED)	16
5	BU-405L	#4 BENT BAR (LEVEL II, DUAL COATED)	1
6	BU-406L	#4 BENT BAR (LEVEL II, DUAL COATED)	1
7	BU-407L	#4 BENT BAR (LEVEL II, DUAL COATED)	1
8	BU-408L	#4 BENT BAR (LEVEL II, DUAL COATED)	1
9	BU-409L	#4 BENT BAR (LEVEL II, DUAL COATED)	2
10	BU-410L	#4 BENT BAR (LEVEL II, DUAL COATED)	1
11		#4 x 8'-2" (LEVEL II, DUAL COATED)	2
12		#4 x 8'-5" (LEVEL II, DUAL COATED)	3
13		#4 x 8'-6" (LEVEL II, DUAL COATED)	5
14		#4 x 8'-8" (LEVEL II, DUAL COATED)	2
15		#4 x 8'-11" (LEVEL II, DUAL COATED)	8
16	BU-501L	#5 BENT BAR (LEVEL II, DUAL COATED)	16
17	BU-502L	#5 BENT BAR (LEVEL II, DUAL COATED)	22
18	BU-503L	#5 BENT BAR (LEVEL II, DUAL COATED)	30
19	BU-521L	#5 BENT BAR (LEVEL II, DUAL COATED)	78
20		#5 x 4'-8" (LEVEL II, DUAL COATED)	12
21		#5 x 7'-3" (LEVEL II, DUAL COATED)	12
22		#5 x 8'-2" (LEVEL II, DUAL COATED)	2
23		#5 x 8'-3" (LEVEL II, DUAL COATED)	10
24		#5 x 8'-4" (LEVEL II, DUAL COATED)	12
25		#5 x 8'-5" (LEVEL II, DUAL COATED)	12
26		#5 x 8'-6" (LEVEL II, DUAL COATED)	42
27		#5 x 8'-7" (LEVEL II, DUAL COATED)	54
28		#5 x 8'-8" (LEVEL II, DUAL COATED)	64
29		#5 x 8'-11" (LEVEL II, DUAL COATED)	16
30		#5 x 24'-4" (LEVEL II, DUAL COATED)	2
31		#5 x 30'-7" (LEVEL II, DUAL COATED)	2
32		#5 x 58'-5" (40'-0" + 17'-5" W/ (1) 2'-0" STAGGERED LAP) (LEVEL II, DUAL COATED)	12
33		#5 x 62'-5" (40'-0" + 24'-5" W/ (1) 2'-0" STAGGERED LAP) (LEVEL II, DUAL COATED)	12
34		SET OF (4) Ø50"Ø x 270 KSI STRAND LIFTING LOOPS	4
35		DAYTON B-16 COIL LOOP INSERTS, ¾" COIL, SNL 3000	28



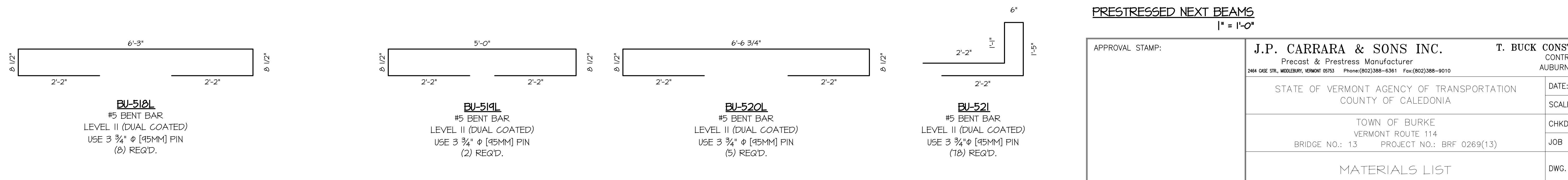
1 NB3D FLANGE REINFORCING PLAN VIEW IN FORM
1/2" = 1'-0"

- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NB3B FOR REINFORCING PLAN
- SEE SHEET NB3C FOR STEM REINFORCING AT BEAM END

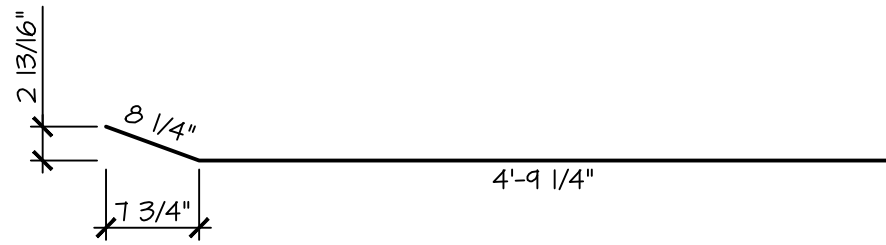
2 NB3D FLANGE REINFORCING PLAN VIEW IN FORM
1/2" = 1'-0"

- LONGITUDINAL REINFORCING NOT SHOWN FOR CLARITY
- SEE SHEET NB3B FOR REINFORCING PLAN
- SEE SHEET NB3C FOR STEM REINFORCING AT BEAM END

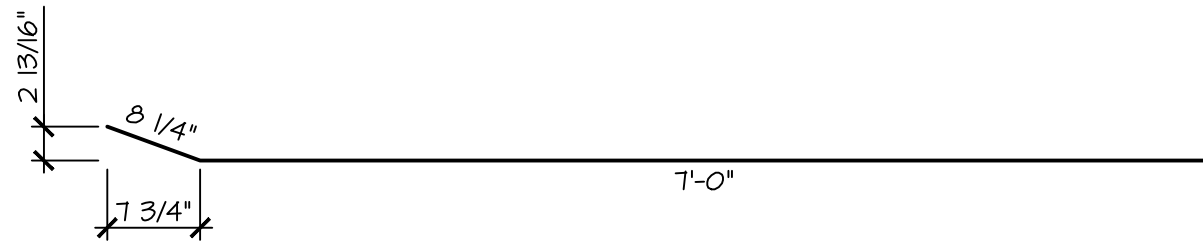
APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CASE ST., MOORESBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)		SCALE: NOTED	
	PRESTRESSED NEXT BEAM DETAILS		CHKD: DFTM: JDK JOB NO: 23454-015	DWG. NO: NB3D



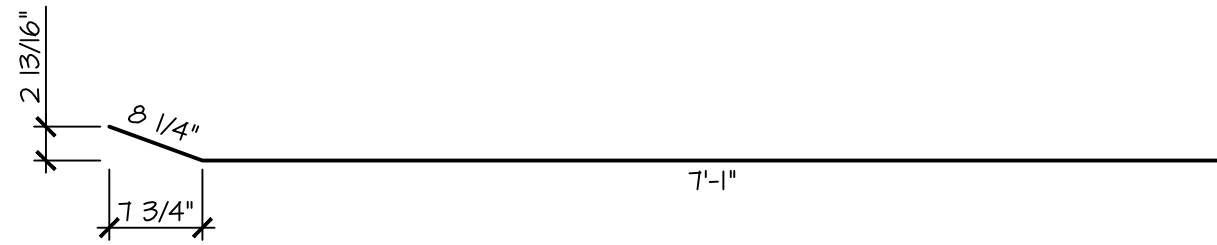
ITEM	MARK	QTY.	DESCRIPTION	REMARKS
1		2	#4 x 8'-2" (LEVEL II, DUAL COATED)	
2		10	#4 x 8'-4" (LEVEL II, DUAL COATED)	
3		3	#4 x 8'-5" (LEVEL II, DUAL COATED)	
4		5	#4 x 8'-6" (LEVEL II, DUAL COATED)	
5		40	#4 x 8'-7" (LEVEL II, DUAL COATED)	
6		2	#4 x 8'-8" (LEVEL II, DUAL COATED)	
7		8	#4 x 8'-11" (LEVEL II, DUAL COATED)	
8		2	#4 x 9'-0" (LEVEL II, DUAL COATED)	
9		4	#4 x 9'-2" (LEVEL II, DUAL COATED)	
10		4	#4 x 9'-3" (LEVEL II, DUAL COATED)	
11		50	#5 x 4'-8" (LEVEL II, DUAL COATED)	
12		42	#5 x 7'-3" (LEVEL II, DUAL COATED)	
13		6	#5 x 7'-5" (LEVEL II, DUAL COATED)	
14		60	#5 x 7'-10" (LEVEL II, DUAL COATED)	
15		46	#5 x 7'-11" (LEVEL II, DUAL COATED)	
16		28	#5 x 8'-0" (LEVEL II, DUAL COATED)	
17		364	#5 x 8'-1" (LEVEL II, DUAL COATED)	
18		14	#5 x 8'-2" (LEVEL II, DUAL COATED)	
19		18	#5 x 8'-3" (LEVEL II, DUAL COATED)	
20		32	#5 x 8'-4" (LEVEL II, DUAL COATED)	
21		12	#5 x 8'-5" (LEVEL II, DUAL COATED)	
22		42	#5 x 8'-6" (LEVEL II, DUAL COATED)	
23		134	#5 x 8'-7" (LEVEL II, DUAL COATED)	
24		64	#5 x 8'-8" (LEVEL II, DUAL COATED)	
25		16	#5 x 8'-11" (LEVEL II, DUAL COATED)	
26		2	#5 x 9'-0" (LEVEL II, DUAL COATED)	
27		8	#5 x 9'-2" (LEVEL II, DUAL COATED)	
28		8	#5 x 9'-3" (LEVEL II, DUAL COATED)	
29		2	#5 x 12'-2" (LEVEL II, DUAL COATED)	
30		2	#5 x 20'-8" (LEVEL II, DUAL COATED)	
31		2	#5 x 24'-4" (LEVEL II, DUAL COATED)	
32		2	#5 x 30'-7" (LEVEL II, DUAL COATED)	
33		48	#5 x 55'-5" (40'-0" + 17'-5" W/ (1) 2'-0" STAGGERED LAP) (LEVEL II, DUAL COATED)	
34		48	#5 x 62'-5" (40'-0" + 24'-5" W/ (1) 2'-0" STAGGERED LAP) (LEVEL II, DUAL COATED)	
35		16	SET OF (4) 0.50"φ x 270 KSI 5 STRAND LIFTING LOOPS	
36		112	DAYTON B-16 COIL LOOP INSERTS, 3/4" COIL, SNL 3000	



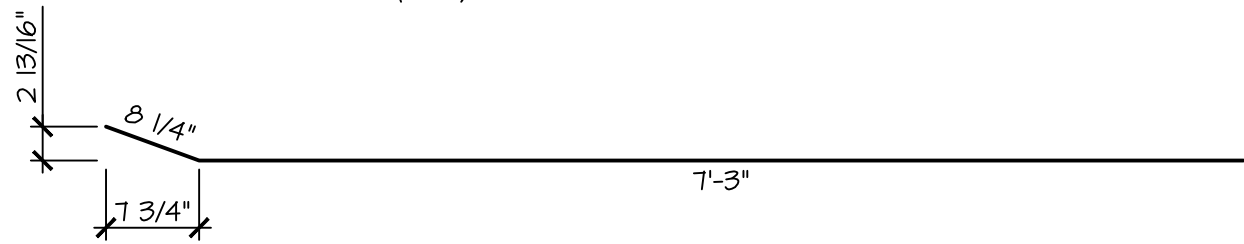
BU-530L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(160) REQ'D.



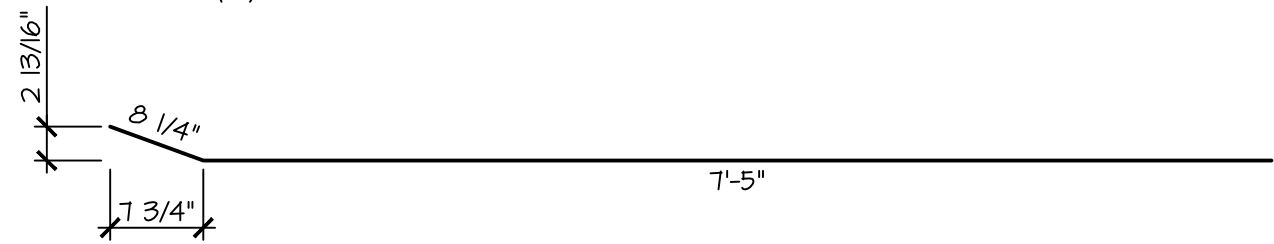
BU-531L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(8) REQ'D.



BU-532L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(4) REQ'D.



BU-533L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(7) REQ'D.



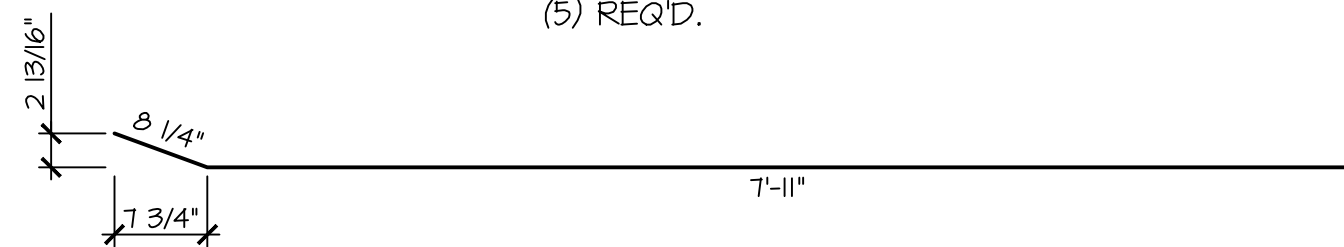
BU-534L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(5) REQ'D.



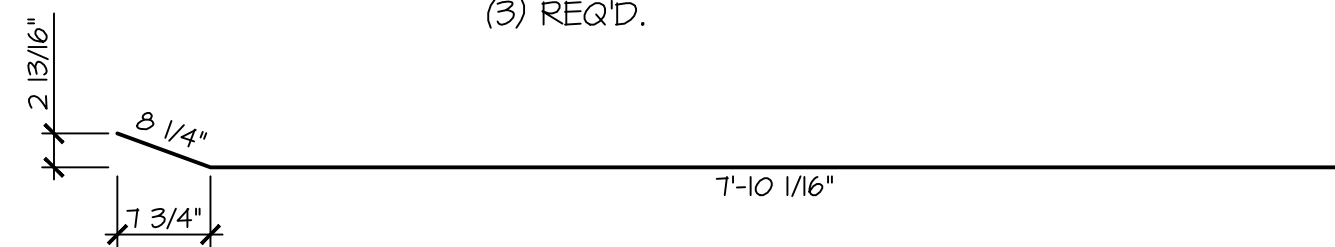
BU-535L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(3) REQ'D.



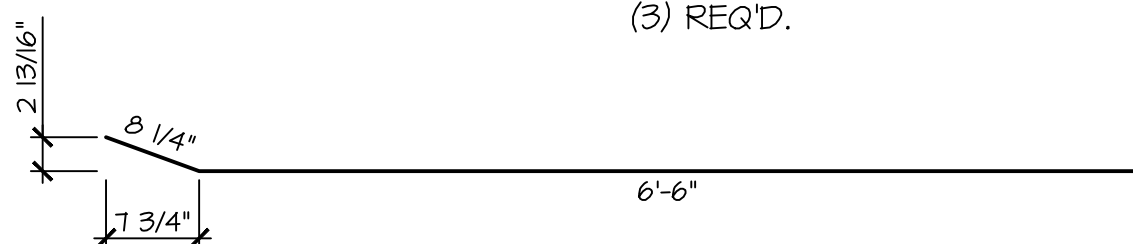
BU-536L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(3) REQ'D.



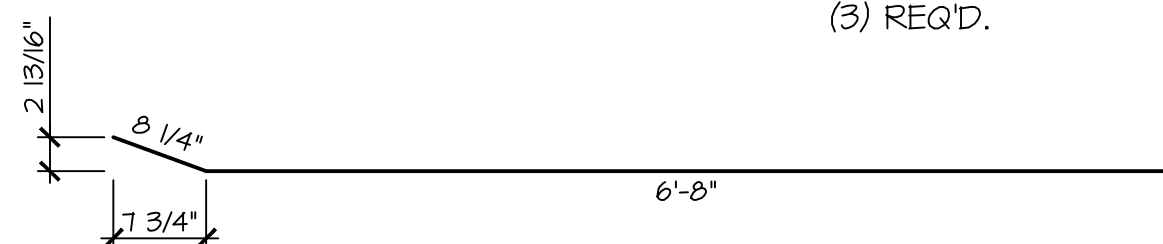
BU-537L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(3) REQ'D.



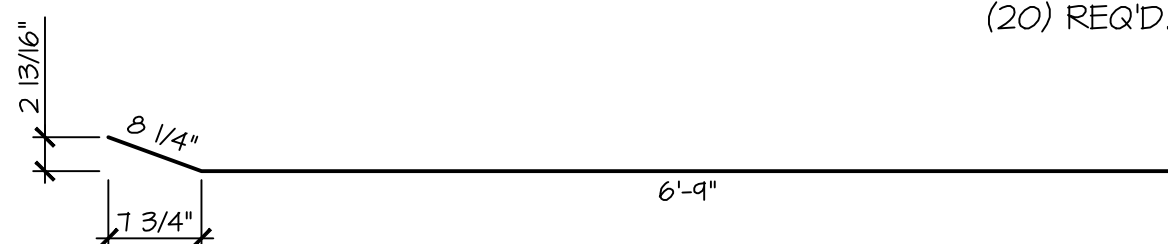
BU-538L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(20) REQ'D.



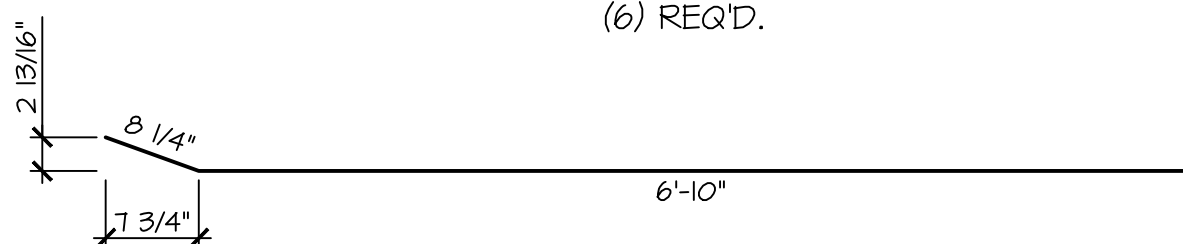
BU-539L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(6) REQ'D.



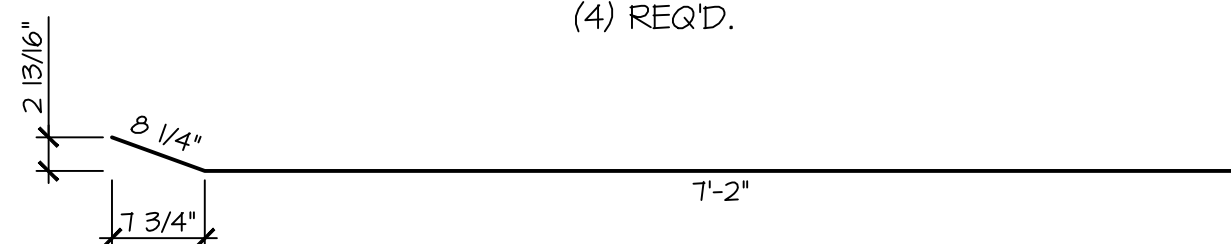
BU-540L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(4) REQ'D.



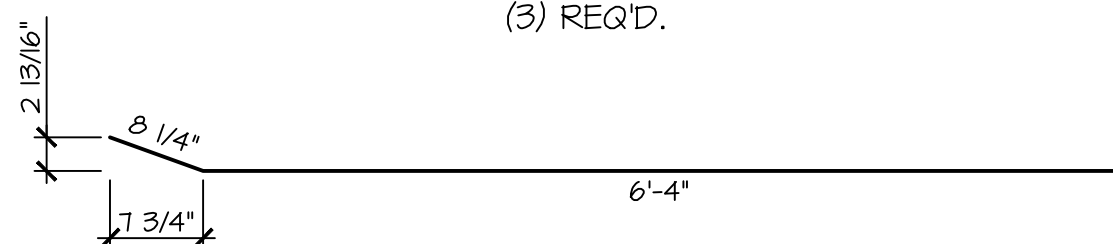
BU-541L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(3) REQ'D.



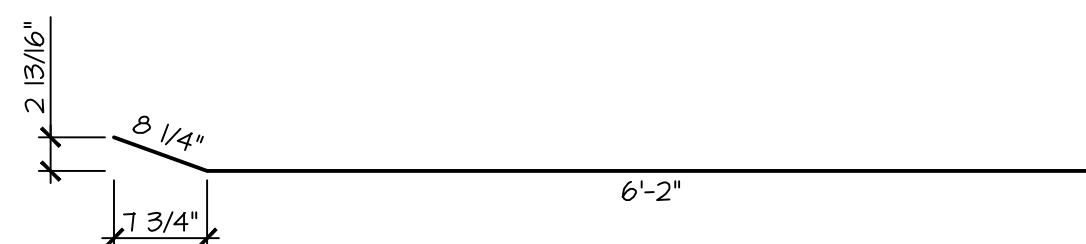
BU-542L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(5) REQ'D.



BU-543L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(3) REQ'D.



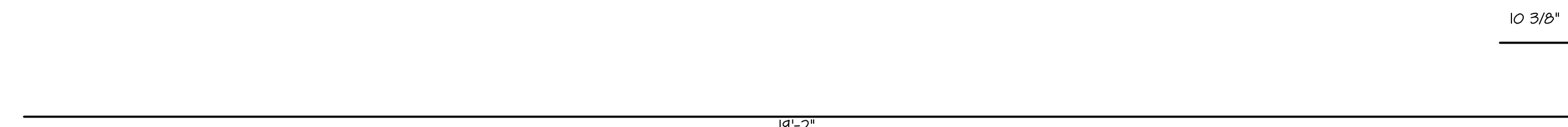
BU-544L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(3) REQ'D.



BU-545L
#5 BENT BAR
LEVEL II (DUAL COATED)
USE 3 3/4"Ø PIN
(3) REQ'D.



BU-901
#9 BENT BAR
LEVEL I (EPOXY COATED)
USE 6"Ø PIN
(79) REQ'D.



BU-902
#9 BENT BAR
LEVEL I (EPOXY COATED)
USE 6"Ø PIN
(2) REQ'D.

MISCELLANEOUS MATERIALS

ITEM	MARK	QTY	DESCRIPTION	REMARKS
1		2	#6 x 16'-2" (LEVEL I EPOXY COATED)	
2		1	#6 x 16'-11" (LEVEL I EPOXY COATED)	
3		2	#6 x 19'-2" (LEVEL I EPOXY COATED)	
4		79	#6 x 19'-7" (LEVEL I EPOXY COATED)	
5		2	#9 x 16'-2" (LEVEL I EPOXY COATED)	
6		1	#9 x 16'-11" (LEVEL I EPOXY COATED)	
7		32	4T x 7 1/8" SKIFT LIFT LIFTER, DOMESTIC ORIGIN	

PRECAST APPROACH SLABS

PRECAST APPROACH SLABS

1" = 1'-0"

APPROVAL STAMP:

J.P. CARRARA & SONS INC.

Precast & Prestress Manufacturer
2464 CAGE STR., WOODBURY, VERMONT 05753 Phone: (802) 388-6361 Fax: (802) 388-9010

T. BUCK CONSTRUCTION, INC.

CONTRACTOR
AUBURN, MAINE

STATE OF VERMONT AGENCY OF TRANSPORTATION
COUNTY OF CALEDONIA

DATE: MAR. 26, 2015

SCALE: NOTED

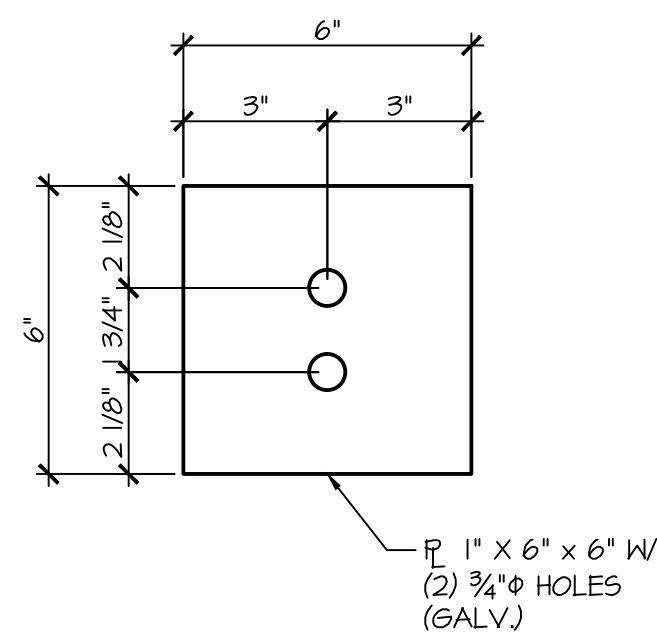
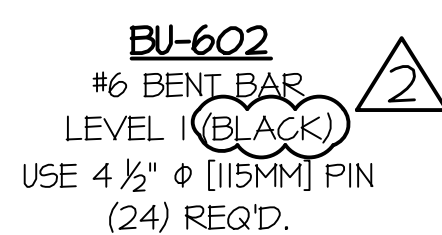
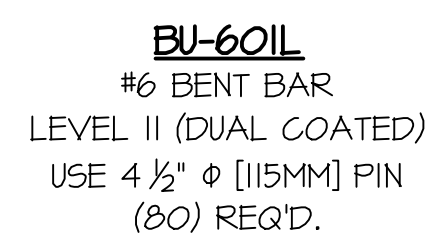
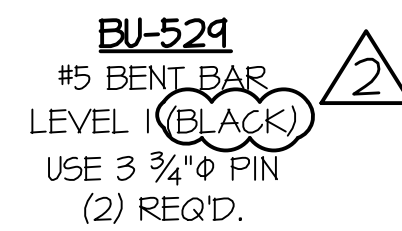
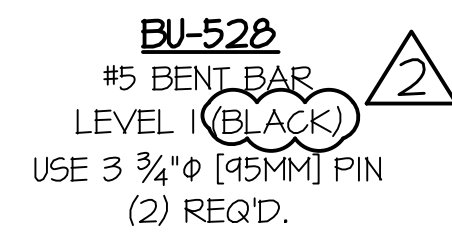
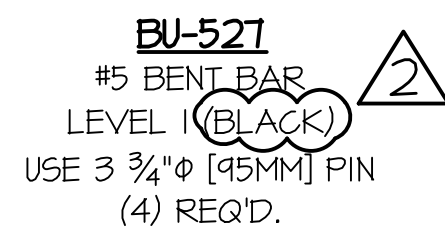
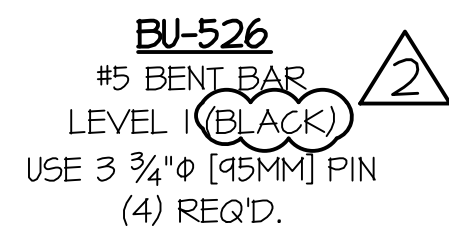
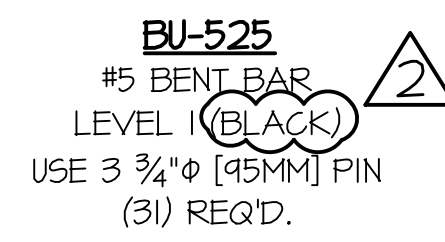
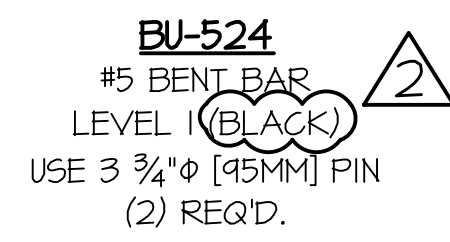
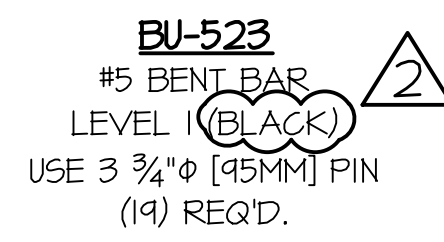
TOWN OF BURKE
VERMONT ROUTE 114
BRIDGE NO.: 13 PROJECT NO.: BRF 0269(13)

CHKD: DFTM: JDK

JOB NO: 23454-015

MATERIALS LIST

DWG. NO: M2



BU-WI
3" = 1'-0"

$$|'' = |' - O''$$

PRECAST ABUTMENTS

APPROVAL STAMP:	J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 2464 CAGE STR., MOULBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		T. BUCK CONSTRUCTION, INC. CONTRACTOR AUBURN, MAINE	
	STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF CALEDONIA		DATE: MAR. 26, 2015	
			SCALE: NOTED	
	TOWN OF BURKE VERMONT ROUTE 114 BRIDGE NO.: 13 PROJECT NO.: BR# 0269(13)		CHKD:	DFTM: JDK
			JOB NO: 23454-015	
MATERIALS LIST		DWG. NO: M3		